MCGM 2024

MALAYSIAN CONGRESS OF GERIATRIC MEDICINE

20-22 JUNE | Setia City Convention Centre (SCCC) Shah Alam, Selangor

Rediscovering the Essence of Geriatric Medicine

Photo by: Laila Hassan, Winner of MCGM 2023 Photo Competition

ABSTRACT

Organised by

MSGM
Malaysian Society Of Geriatric Medicine

Managed by

GLOBEWERKS CONFEX

ORAL PRESENTATIONS

Abstract Id: CO_02

Khairul Ameen Mohamad Sabri[1], Terence Ong[1], Tak Loon Khong[1]
[1]Universiti Malaya

Title: Role of Geriatricians in Preoperative Optimisation of Geriatric Surgical Patients in Universiti Malaya Medical Centre

Background: Surgery in population aged ≥65 years leads to high rates of postoperative complication, readmission and mortality. Preoperative optimisation in this population is therefore crucial to prevent these outcomes.

Aim: This study aims to review the role of geriatricians in preoperative optimisation of geriatric surgical patients in Universiti Malaya Medical Centre (UMMC).

Methodology: This is a cross-sectional analysis of patients ≥65 years referred from surgical unit to geriatric medicine for preoperative optimisation from January 2021 to December 2023. Patient demographics, intervention done and outcomes were reviewed through the electronic medical record.

Results: 24 patients were referred from the surgical unit for preoperative optimisation. Mean age on initial diagnosis was 74.5 years (SD: 7.5). 21 (87.5%) of the patients had ≥1 comorbid condition. 22 (91.7%) of the patients were diagnosed with cancer and upon referral, 11 (50.0%) were in stage 3 and 4 (18.2%) in stage 4. Median duration from diagnosis to surgical review was 9 days (IQR: 19.0). Median duration from surgical review to geriatrician referral was 37 days (IQR: 59.0). Mean duration for geriatrician review was 8.9 days (SD: 11.0) from referral. During review, 5 (20.8%) patients were ECOG 1 and 12 (50.0%) were ECOG 2. 14 (58.3%) were advised for nutritional modification, 12 (50.0%) for pre-habilitation program and 4 (16.7%) for comorbid optimisation. 21 (87.5%) were referred and reviewed by sports medicine physician. 15 (62.5%) patients subsequently underwent surgery. Of those with cancer, 2 (14.3%) received neoadjuvant treatment and 4 (28.6%) received adjuvant treatment. Of those managed non-operatively, 4 (44.4%) were due to personal choice and 2 (22.2%) were not fit for surgery. Median follow-up time from diagnosis was 12 months (IQR: 4.0). 8 (66.7%) of patients operated in UMMC developed postoperative complications. No mortality was recorded during index admission. 13 (54.2%) had ≥1 readmission, with 7 (53.8%) for infection and 3 (23.1%) for cardiovascular complication. Mortality within the time period was 2 (8.3%) patients.

Conclusion: Preoperative optimization of geriatric patients requires a structured multidisciplinary approach. More rigorous investigations are needed to consolidate the approach and study the impact over a larger scale.

Shin wuei Tan[1], Jun Ni Keng[1]
[1]Hospital Seberang Jaya

Title: Intracranial Hemorrhage following Intravenous Thrombolysis in Old Acute Ischemic Stroke Patients: Single Stroke Center

Background: The majority of strokes occur in older adults, with more than 75% occurring in people over the age of 65. However, there is no consistent recommendation of intravenous thrombolysis for older patients. Thrombolysis is not considered in old stroke patients due to concern of increased risk of intracranial hemorrhage and poor stroke outcome.

Aim: We aimed to study the incidence and factors associated with intracranial hemorrhage following intravenous thrombolysis and in-patient mortality.

Methodology: We performed a retrospective cross-sectional study on all old acute ischemic stroke patients aged 60 years and above who received intravenous thrombolysis during the period from January 1st, 2011 to December 31st, 2023. Data was collected from the local stroke registry in Hospital Seberang Jaya, a regional stroke center.

Results: A total of 191 patients were included within these 12 years, with a mean age of 68 ± 6 years. 47 patients (24.6%) developed thrombolysis-associated intracranial hemorrhage, and 18 (38.3%) were symptomatic. Post-thrombolysis in-patient mortality rate was 26.2% (n = 50). The most common cause of death was acute ischemic stroke (11.0%), followed by intracranial hemorrhage (10.5%), and non-cerebral deaths (4.7%). The severity of National Institute of Health Stroke Scale (NIHSS) score increased the risk of thrombolysis-associated intracranial hemorrhage (hazard ratio, 1.08; 95% confidence interval $1.02 - 1.15$). Although age, NIHSS score and intracranial hemorrhage were found associated with in-patient mortality ($p < 0.05$), NIHSS score was the single factor influencing in-patient mortality after binary logistic regression (hazard ratio, 1.15; 95% confidence interval 1.08-1.24).

Conclusion: NIHSS score is an important factor in intracranial hemorrhage following intravenous thrombolysis and mortality in old acute ischemic stroke patients. Although thrombolysis-associated intracranial hemorrhage is common but majority is asymptomatic and it is not independently affecting mortality in this group of patients. Our center in-patient mortality was recorded higher than previous studies, in which 10% of deaths occurred. The reason may be multifactorial because our stroke center lacks a well-established post-stroke rehabilitation program for older patients.

Abstract Id: SO_10

Sheron Sir Loon Goh[1], Foong-Ming Moy[1], Sumaiyah Mat[1 2], Shazeea Mohamed Ali[3], Zi Xin Hoo[1], Maw Pin Tan[1]
[1]Universiti Malaya, [2]Universiti Kebangsaan Malaysia, [3]Austin Hospital

Title: Psychosocial and health-seeking behaviour influence on fall risk among older persons with type 2 diabetes

Background: Older persons with diabetes have an increased falls risk. Falls can lead to serious complications such as decreased functional status, increased healthcare utilisation, morbidity and mortality.

Aim: To assess the influence of psychosocial factors and health-seeking behaviour on fall risk in individuals with type 2 diabetes

Methodology: This prospective study included community-dwelling adults aged ≥55 years selected through stratified random sampling from three neighbouring parliamentary constituencies. Baseline data was collected in 2013-2015 with computer-assisted home-based interviews and the follow-up in 2019 via telephone interviews. Diabetes was using self-reported physician-diagnosis, medication use or glycated haemoglobin (HbA1C) levels.

Results: Diabetes was present in 37.2% of the 908 included participants. The prevalence of falls among older persons with diabetes increased from 22.8% to 26.7% after 5 years of follow-up. The risk of falls (OR:1.346; 95% Cl: 0.837-2.163) and recurrent falls (OR:1.054; 95% Cl: 0.513-2.167) at follow-up were higher compared to non-diabetics. There were significant differences in education status, ethnicity, hypertension, hyperlipidaemia, myocardial infarction, ≥ 3 comorbidities, alcohol consumption, seeking healthcare utilization, depression, and stress between groups. Diabetes was significantly associated with prospective falls after adjustments for age, education, ≥ 3 comorbidities and social isolation (OR:1.412; 95% CI: 1.013-1.969), but this relationship was attenuated after additional adjustment for the presence of depression, anxiety or stress (OR:1.407; 95% Cl:1.000-1.980).

Conclusion: Our findings suggest that psychological issues mediated the increased risk of falls at five-year follow-up in individuals aged 55 years and over with diabetes. These findings highlight the potential importance of psychosocial support among older diabetics to reduce the risk of falls and improve patient outcomes and quality of life.

Abstract Id: CP_13

Nareshraja Janardanan[1], Hwei Wern Tay[1], Yi Bin Ho[1], Wan Feng Ong[1], Malarkodi Suppamutharwyam[1], Rizah Mazzuin Razali[1]
[1]Ministry of Health

Title: Understanding Frailty in the Community: The Role of Gait Speed, Grip Strength, and Cognition

Background: One in every five community-dwelling older adults in Asia are frail. As a multidimensional syndrome, frailty is linked with adverse health outcomes including physical function disability, falls and cognitive dysfunction. But which outcome correlated most with frailty?

Aim: We investigated the association between frailty and deterioration in gait speed, grip strength and cognitive function among community-dwelling elderlies in our city.

Methodology: A community health screening was done at a local park in 2023. Older adults were screened for frailty using PRISMA-7 with a score of >2 indicated frailty. A reduced gait speed was classified as <0.8m/s and a reduced grip strength was classified as <18 kg for women and <28kg for men. Additionally, cognitive impairment was signified by a Mini-Cog score of <3. Correlation between impaired gait speed, grip strength and cognition with frailty was done using Chi-Squared and Fisher Exact Test.

Results: We studied 90 older adults with an average age of 66.5 years with most being women (66.7%) and ethnic Malays (81.1%). Although 60.0% were obese, 42.2% had hypertension and 20.0% had diabetes, only 7.9% were frail and the rest were not. Further analysis revealed that while only 4.4% had reduced gait speed, 40.4% had reduced grip strength and 11.1% had impaired cognition. More importantly, we found that in this population, frailty was associated with reduced gait speed (p=0.03) but not with impaired strength (p=1.00) and cognitive dysfunction (p=0.54). This is consistent with a previous systemic review that emphasizes this correlation among other health outcomes. However, no significant correlations were discovered between frailty and grip strength or cognitive dysfunction in this population which is in contrast with previous studies which have shown such a correlation. Limitations of this study include a small sample size, convenience sampling and the usage of simple screening tools rather than comprehensive assessments.

Conclusion: Among older adults in our community, frailty was predominantly associated with reduced gait speed compared with impaired grip strength and cognitive impairment. Hence, for these elderlies, multidimensional interventions targeting frailty should focus on improving gait speed. Furthermore, improvements of gait speed have also been liked to improved survival.

Abstract Id: CO_15

Lee Yee Ting[1], Yee Yew Loong[2], Nurin Nasuha Mohamad Sopi[2], Jia Nee Ling[1], Ing Khieng Tiong[1]
[1]Sarawak General Hospital, [2]Sarawak Heart Centre

Title: Advancing Frailty Awareness: Screening Insights from an Older Persons' Celebration in Sarawak

Background: Frailty, characterized by heightened vulnerability to adverse health outcomes, represents a pressing public health concern, particularly in ageing populations. Frailty often eludes detection until precipitating acute events, resulting in escalated morbidity and healthcare exigencies. Frailty screening is crucial, yet its implementation remains debatable: whether universally across populations or selectively targeted based on case identifications or individual interests.

Aim: This study aims to delineate the demographic and clinical profiles of individuals participating in frailty screening during the International Days of Older Persons (IDOP) celebrations at Sarawak Heart Centre on 27th October 2023.

Methodology: Convenience sampling was employed to screen elderly attendees of the IDOP celebration. Frailty assessments utilizing Clinical Frailty Scale (CFS) self-questionnaire and FRAIL scale with a battery of physical and mental screening tests were administered.

Results: Out of 132 participants, 31/69 (52%) elderly consented to screening. The cohort, predominantly in the youngest old (90.3%), comprised of female (81%) and married (65%) participants who reside with their family (93%). 90% of participants had comorbidities with hypertension prevailing (55%). Seven participants described recent weight loss and fell within the preceding year. CFS identified 67.7% robust, 25.8% pre-frail, and 6.5% frail individuals, whereas FRAIL scale reported 92% robust and 8% pre-frail individuals. Physical screening identified abnormalities in the Timed up and Go (TUG) test (13%), 30s Chair Stand test (13%), 4-stage balance test (13%), and hand grip strength (27%), with three participants displaying moderate impairment in Abbreviated Mental Test Scores (AMTS). Bone ultrasound scans revealed osteopenia in 12 participants and osteoporosis in 3 participants. One-third of participants necessitated referral to GEKO (community geriatric services) for further evaluation.

Conclusion: Limited workforce and logistical constraints affected screening uptake, highlighting challenges in implementing frailty screening programs in public. The discrepancy in frailty classification between the two tools underscores the importance of using multidimensional assessments with further validations in mass screening. One-third of our cohort required further assessment, indicating a potentially higher prevalence of frailty in our community compared to the reported global rate of 10%. The study underscores the importance of integrating comprehensive and accessible frailty screening into routine healthcare to address the needs of ageing populations.

Abstract Id: SO_19

[1]Yuezhong Liu, Chek Hooi Wong[2], Noam Shoval[3], Moon-Ho Ringo Ho[1], Yin-Leng Theng[1]
[1]Nanyang Technological University, [2]National Innovation Challenge/NMRC Singapore, [3]Hebrew University of Jerusalem

Title: Impact of Built Environment on Mobility of Older Adults: A Case Study of Singapore

Background: The relationship between the environment and mobility for older adults has been an area of growing interest in recent years. Research in this area has focused on identifying environmental factors that may promote mobility or impair cognitive health in older adults. There is a growing body of evidence suggesting that various factors, including social connections, physical environments, and urban morphology, can have significant impacts on mobility in older adults.

Aim: This study aims to examine the interplay between the intrinsic capacity of older adults and built environmental characteristics, and how these factors influence their mobility in neighbourhoods.

Methodology: We analyzed the secondary data which contains 33 participants who travelled a total of 2,428 kilometres and took a combined 1,428,793 steps outside of their homes over a period of 220 days in Singapore. Mini-Mental State Examination (MMSE) cut-offs (accounting for education attainment) were used to distinguish between those with cognitive impairment (CI) and non-impaired individuals (Non-CI).

Results: The mean (SD) age of the participants was 69.2 (7.14), and 21 (64%) of them were female. 14 (42%) participants were identified as having cognitive impairment. A high Gross Plot Ratio was found to be associated with a lower walking speed for both individuals with (b=-0.03, t = 0.19, p < .01) and without cognitive impairment (b=-0.03, t = 0.16, p < .01). There was no significant difference in walking speed between residential areas and open spaces, such as parks and roads, for both groups. The walking speed of individuals with CI was generally slower compared to Non-CI, with the greatest difference observed in business areas where the latter group walked at a speed twice as fast.

Conclusion: Individuals with CI had a slower walking speed and required more adaptation to the environment. They also experienced lower quality of life-space interaction and relied more on vehicular travel. Creating an environment that requires less attention and reduces cognitive load may help promote safe walking among individuals with CI and compensate for their reduced ability to perceive risk.

Abstract Id: CP_21

Hwei Wern Tay[1], Anthea Yee Leng Leong[1], Nor Hakima Makhtar[1], Ungku Ahmad Ameen Ungku Mohd Zam[1]
[1]Hospital Tengku Ampuan Rahimah

Title: Improving Medication Intake Safety for Malaysia's Elderly: The Case for Swallowing Assessment System Implementation.

Background: Dysphagia, common in elderly individuals with neurological conditions like strokes and degenerative disease; poses challenges in medication administration due to the absence of an instrumental swallowing assessment tool. This leads to uncertainty about drug absorption, impacting the delivery of medications, especially osteoporosis cases. Highlighting the importance of reliable instrumental assessment tools, particularly for fluid consistency, this case underscores the need for healthcare professionals to address swallowing difficulties, ensuring proper medication intake and improving swallowing outcomes for elderly patients.

Aim: Emphasize the importance of establishing a systematic swallowing assessment to ensure drug therapy safety and effectiveness.

Methodology: Case Presentation: Ms. R, 78-year-old, presented with slurred speech, right-sided weakness, and facial asymmetry. CT Brain revealed multiple infarcts, small vessel disease, and cerebral atrophy. From Chest X-ray and other assessment, Ms R needs Ryles tube due to swallowing difficulties. Further evaluation includes falls at home and an old L1 vertebral compression fracture. Considering her condition and the need for Alendronate treatment, she needed to demonstrate safe pill swallowing with significant amount of clear fluid (water). Following serial assessments and FEES by speech therapists, it was determined that Ms. R was capable of swallowing the Alendronate tablet and resume her regular soft diet and fluid intake.

Results: Discussion: This case report discusses diagnosing and treating dysphagia for a patient needing Alendronate tablets for osteoporosis. Ms. R transitioned from a nasogastric tube with a modified diet and rehabilitation. Bedside Swallowing Evaluation is commonly used to assess swallowing for NGT patients. The risk of aspiration with thin fluids during Alendronate intake is based on assumptions. Golden standard assessments like VFSS or 3D CT scans were not available, leading to inaccurate dysphagia diagnosis and treatment. This impact the safety of oral intake of bisphosphonates. VFSS and 3D CT scans are crucial to ensure the entry of medication into stomach, avoiding oesophageal ulceration.

Conclusion: It's crucial to establish a systematic swallowing assessment system to ensure drug therapy safety and effectiveness. We recommend implementing Video Fluoroscopic Swallow Studies (VFSS) or 3D CT scans in Ministry of Health settings to prepare for the aging population.

Abstract Id: SO_22

Mae Jane Khaw[1], Wei Ven Chin[2]
[1]Limbang Hospital, [2]Sarawak General Hospital

Title: Clinical Profile and Prognostic Indicators for Geriatric Patients in the Intensive Care Unit (ICU)

Background: With the advent of healthcare advancements and demographic transition, the geriatric population is rapidly expanding, leading to increased demand for ICU facilities. Assessment of clinical determinants of survival outcomes will help to stratify decisions regarding ICU admission and guide their medical treatment.

Aim: This study aims to evaluate the clinical profile and prognostic factors for the survival of geriatric patients in the ICU.

Methodology: A retrospective single-institution cross-sectional study was conducted among 33 medical ICU patients aged 65 years and above, who were admitted to Limbang Hospital between March 2022 and March 2024. Sociodemographic and clinical-functional data collected from patients' medical records were statistically analysed with IBM SPSS Statistical software. Clinical frailty scale (CFS) ≥5 was considered the cutoff point for defining frailty. Multimorbidity was defined as the presence of two or more chronic diseases. Polypharmacy refers to using five or more regular medications.

Results: In this study, 18 (55%) were male and 15 (45%) were female. The vast majority of the patients (61%) were aged 65 to 74 years old. Baseline CFS assessment revealed a nearly equal distribution of individuals with CFS <5 and ≥5 (16 and 17 patients, respectively). The prevalence of multimorbidity was 82%, with hypertension being the most frequent comorbidity. The prevalence of polypharmacy was 64%. Pneumonia was the most commonly diagnosed condition. The parameters that portray a significant association with outcome upon discharge are heart rate on admission, bicarbonate and lactate levels in blood gas, inotropic requirement, length of stay in the ICU, APACHE II, as well as SOFA scores. Heart rate on admission (OR = 0.935, 95% CI: 0.882-0.992), lactate (OR = 0.681, 95% CI: 0.492-0.943), and inotropic requirements (OR = 0.354, 95% CI: 0.141-0.886) are identified as significant predictors of mortality in geriatric patients in the ICU (all $p< 0.05$).

Conclusion: Managing geriatric patients in the ICU presents unique challenges due to preexisting multimorbidity and frailty. Early identification of clinical predictors of mortality is imperative in providing comprehensive care for critically ill elderly individuals. This approach helps to minimise both over- and under-treatment, ultimately enhancing survival outcomes.

Abstract Id: SO_23

Su Wei Wan[1], Lina Choe[1], Gretel Jianlin Wong[1], Wee Ling Koh[1], Janelle Ng[1], Wee Hian Tan[2], Joanna Li Xin Ooi[2], Jacquelyn Melod[2], Ker Kan Tan*[1][2]
[1]National University of Singapore, [2]National University Health System (NUHS)
*Corresponding author

Title: Understanding older adults' perspectives on teleconsultation use in the primary care setting: A qualitative study

Background: Ever since the COVID-19 outbreak, the world has become a digital playground. Yet, against the backdrop of rampantly introduced telehealth services is limited understanding of its acceptability and usability among community-dwelling older adults with chronic diseases.

Aim: To explore the perspectives of older adults towards teleconsultation use for chronic disease management in the primary care setting.

Methodology: This study adopted a descriptive qualitative design using the naturalistic inquiry approach. Older adults ≥ 65 years (N=20) receiving regular maintenance health checks at two primary healthcare institutions in Singapore were conveniently sampled to participate in semi-structured interviews guided by the Unified Theory of Acceptance and Use of Technology (UTAUT). Inductive thematic analysis was performed.

Results: Five themes were yielded: more than just a physical consult; the difference in modes – does it matter?; psychological receptivity to new technology; appropriateness of teleconsultation for medical condition; and moderating factors. Older adults were generally ambivalent to the idea of seeing their doctors on-screen. Despite the foreseeable benefits of this remote approach, teleconsults were perceived to be challenging and questionable for its quality, privacy, cost and complexity.

Conclusion: The extensive properties of teleconsult services remain unknown to many and thus several implementation challenges exist when attempting to catalyse its adoption among those who are uninformed and less technology-savvy. Carefully devised strategies involving public education, structured algorithms and greater physician advocacy are crucial for easing its uptake, which may relieve both disease and healthcare burden in the long run.

Abstract Id: SO_43

Nurul Nabilah Akmal Hashim[1], Vijeya Priyan Subramaniam[2], Maw Pin Tan[1], Sumaiyah Mat[3], Fadhli Mohamed Sani[2], Kwan Hoong Ng[2]
[1]Universiti Malaya, [2]Universiti Malaya Medical Centre, [3]Universiti Kebangsaan Malaysia

Title: Bioelectrical Impedance Analysis, Dual Energy X-ray Absorptiometry and Magnetic Resonance Imaging in Sarcopenia Detection

Background: While bioelectrical impedance analysis (BIA) has been widely used in population studies to measure body composition for sarcopenia screening, sensitivity and accuracy concerns remain. However, the accuracy of BIA measurements has improved with advancing technology and algorithm.

Aim: This study aimed to determine the correlation between muscle mass measured by BIA with dual energy x-ray absorptiometry (DXA) and magnetic resonance imaging (MRI) measurements.

Methodology: 604 community-dwelling older adults aged 60 years and above residing in Klang Valley were recruited. Anthropometric and BIA measurements were performed on all participants. 72 of the participants underwent MRI, while 27 of participants underwent DXA scans. Muscle was estimated as appendicular skeletal muscle (ASM) by DXA. Cross-sectional area of 50% femur (CSAF) and volume of middle third of thigh (VMTT) were segmented by MRI.

Results: BIA measurement was moderately correlated with DXA (r= 0.459). Weak to moderate correlation existed between BIA and MRI segmented muscle (r CSAF= 0.343, r VMTT= 0.373). Muscle% was moderately correlated with muscle-to-fat ratio (MFR) by MRI (r CSAF= 0.492, r VMTT= 0.504). DXA and MRI segmentations were highly correlated (r CSAF= 0.726, r VMTT= 0.796).

Conclusion: If MRI is considered the gold standard for muscle mass measurement, then DXA would be the preferred modality rather than BIA for clinical assessment of muscle mass. MRI is both expensive and time consuming, and hence not practical for clinical use. DXA availability however remains limited to larger centers and is more expensive and less portable. BIA is highly portable and affordable but needs to be used alongside clinical judgement.

Abstract Id: SO_46

Fatimah Hani Hassan[1], Nur Izyan Mohd Amin[1], Akmaliza Ali[1], Nor Azura Azmi[1], Mohd Harimi Abd Rahman[1], Hanif Farhan Mohd Rasdi[1], Nor Azlin Mohd Nordin[1]
[1]Universiti Kebangsaan Malaysia

Title: Relationships of Functional Abilities and the Quality of Life of Older Muslims in Rural Malaysia

Background: Quality of life (QoL) encompasses various factors that contribute to the overall well-being of older adults. High QoL may indicate that older individuals are living fulfilling and meaningful lives as they age.

Aim: This study aimed to determine the quality of life of older adults who are living in rural areas, and identify the demographic factors and functional abilities that influence participants' level of health-related quality of life.

Methodology: In this cross-sectional study, data collection was conducted in five rural districts in Negeri Sembilan with 121 participants. All participants, who are Malays, Muslims, and above 60 years old, took part in a face-to-face structured interview session using the Muslims' Health-Related Quality of Life Questionnaire.

Results: Health-related QoL scores were averaged at 75.0 (standard deviation=15.4, range 20-100) from a scale of 0-100, where the highest score indicated a perfect quality of life. Following a stepwise multiple regression analysis, two functional abilities were found related to the health-related QoL scores: overall visual health (standardized β = 0.43, t = 5.76, p = 0.00), and physical strength and stamina (standardized β = 0.36, t = 4.82, p = 0.00). The effect size (R^2) of this model was = 0.41. None of the demographic factors were found significantly related to the health-related QoL.

Conclusion: Sensory and physical abilities may influence health-related QoL among older Muslim adults who are living in rural communities. However, only visual sensory was significantly related to QoL, and not other sensory-based functions, such as hearing. Strength and stamina were significantly related to QoL, but not other physical abilities, such as mobility. This study provides insights into the abilities that may influence QoL among older adults. Findings may be used to allocate appropriate services specific to this community.

Abstract Id: CO_49

Siew Im Khoo[1], Shin Wuei Tan[1], Jun Ni Keng[1]
[1]Hospital Seberang Jaya

Title: Predisposing and Precipitating factors for delirium among older hospitalized adults: A prospective cross-sectional study

Background: Delirium is a serious neuropsychiatric condition characterized by acute and fluctuating inattention, change in cognition and disturbance in awareness. Delirium is a common, costly, and potentially devastating condition for older hospitalized adults, unfortunately it is often unrecognized.

Aim: We aimed to identify predisposing and precipitating factors associated with delirium in acutely admitted older adults.

Methodology: We performed a cross-sectional prospective study on patients aged 65 years and above who admitted to the medical wards from 1st January to 31st March 2018. Subjects were recruited by convenience sampling within 48 hours of admission. All patients were screened for presence of delirium using the Short Confusion Assessment Method (CAM-S) form, further confirmed by the gold standard DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition) criteria.

Results: Twelve patients (9%) out of 131 patients screened and recruited had prevalent delirium. The predisposing factors were being oldest old (≥ 80 years old), having lower education levels, and frail older adults, which were found to be statistically significant (p value <0.05). Precipitating factors for having a prevalent delirium were hypoxia, physical restraint, iatrogenic events, electrolyte imbalance, hip fracture, immobility, and sleep disturbance (p value <0.05). Based on simple logistic regression, the predisposing factors of oldest age (odd ratio (OR), 19.29; 95% confidence interval (CI) 2.13–174.11), nursing home residence (OR 7.73; 95% CI 1.15–51.82), and frail older adult (OR 5.925; 95% CI 1.52-23.11) are associated with an increased risk of developing delirium. While malnutrition (OR 26.37, 95% CI 6.43-108.12), dehydration (OR 14.36, 95% 3.02-68.42), physical restraint (OR 23.60, 95% CI 1.93-283.46), iatrogenic event (OR 11.7, 95% CI 1.486-92.129), electrolyte imbalance (OR 3.54, 95% CI 1.02-12.27), immobility (OR 14, 95% CI 3.49-56.15) and sleep disturbance (OR 11.43, 95% CI 2.88-45.36) were associated with precipitating delirium in older hospitalized patients. However, after multiple logistic regressions, only immobility (OR 11.18, 95% CI 1.26-99.01, p value 0.03) was the only factor that associated with increased the risk of delirium.

Conclusion: Identification of the predisposing and precipitating factors allows prevention, early detection and appropriate management of delirium to prevent morbidity and mortality of older hospitalized patients.

Abstract Id: SO_50

Muhammad Nizamuddin Othman[1], Mohammad Nazri MD Shah[1], Terence Ong[1]
[1]University Malaya

Title: Ultrasound measurement of quadriceps muscles as an assessment tool for sarcopenia in hospitalized older patients

Background: Sarcopenia is defined as 'age-related loss of muscle mass, accompanied with reduced muscle strength, and/or diminished physical performance'. Ultrasound offers a non-invasive method for assessing muscle mass, with the quadriceps femoris muscle being commonly utilised.

Aim: This study aims to evaluate the association of those at risk of sarcopenia among hospitalised older patients with quadriceps muscle quantity and quality using ultrasound.

Methodology: This is a single-centre prospective study involving 40 participants (≥65 years old) admitted to the medical ward from June 2021-July 2022. Ultrasound of the quadriceps muscle was performed. Quadriceps muscle layer thickness (QMLT), rectus femoris cross-sectional area (RFCSA), pennation angle (PA) and fascicle length (FL) were measured. Participants demographics and ultrasound measurements were compared between those at risk of sarcopenia categorised based on SARC-F (score ≥4), and SARC-calF(≥11).

Results: The mean age was 75.9 (+7.0) years, 25(62.5%) were female, and the majority being Malay (17,42.5%). Mean duration of scan was 1.5 days from the admission. SARC-F identified 21(52.5%) at risk, SARC-calF 22(55.0%), and calf circumference 25(62.5%). There was no difference in age gender, ethnicity (except malay, p-value:0.021) and body mass index (except for SARC-calF, p-value:0.016) between those at risk of sarcopenia and not at risk. Statistically significant relationship between SARC-calF and QMLT (No risk: mean(SD): 2.55 ± 0.66, at risk: 1.99 ± 0.54, 95% CI: 0.559, p-value: 0.005), RFCSA (No risk: mean(SD) : 3.37 ± 1.10, at risk: 2.49 ± 1.18, 95% CI : 0.887, p-value: 0.02), and PA (No risk: mean(SD) : 13.56 ± 3.25, at risk:10.34 ± 2.65, 95% CI : 3.222, p-value: 0.002). No significant association seen between SARC-F and ultrasound parameters. The mean time for ultrasound measurement was 8.6 minutes.

Conclusion: Ultrasound assessment of quadriceps muscles provides a possible method to identify older hospitalised patients at risk of sarcopenia.

Abstract Id: CO_53

Sing Hui Chee[1], Kit Mun Tan[2], Seok Ling Ooi[1], Kah Yan Wong[3]
[1]KKM, [2]UMMC, [3]Genting TauRx Diagnostic

Title: Anticoagulation in Complex, Older Persons with AF and Ischemic Stroke

Background: Novel oral anticoagulants (NOACs) has become the mainstay of stroke prevention in patient with Atrial Fibrillation (AF). Frail and complex older persons still benefit from anticoagulation with good benefit/risk ratio. However, an older person may not be anticoagulated due to various reasons.

Aim: To determine the characteristics and outcomes of older persons with AF and stroke with and without anticoagulation.

Methodology: This is a retrospective study of all older person (>65 years) admitted to the Geriatric Medicine Ward in University Malaya Medical Center (UMMC) for stroke with AF from January 2016 - December 2021.

Results: There were 539 patients with stroke, of which 111 (21%) had AF. 73/111 (66%, average age 84.4 ± SD 6.3) were commenced on anticoagulation for secondary stroke prevention, and 38 (34%, 85.7 average age ± SD 5.4, p=0.202) were not prescribed anticoagulation. The average length of follow up was 701 days. Both groups recorded almost similar frailty, with median Clinical Frailty Score of 5 of those with anticoagulation, and 6 of those without anticoagulation. 65 (89%) were commenced on NOACS and 8 (11%) on warfarin. The main reasons recorded for not commencing on anticoagulant were
The occurrence of major bleed (15% vs 10%, p=0.507), minor bleeding (9.6% vs 2.6%, p=0.179), and drop in haemoglobin without apparent bleeding (12.3% vs 2.6%, p=0.09) were higher in the anticoagulated group compared to the non-anticoagulated group. Although the non-anticoagulated group showed lower complications, the outcome of death is significantly higher than the anticoagulant group, 29 (76.3%) compared to 20 (27.4%) in the anticoagulated group (P=0.00).

Conclusion: This study shows that complications of anticoagulation are significantly increased when given in frail, older patients with stroke and AF. However, the death outcome is less compared to patients who did not receive anticoagulation. Further studies are needed to determine factors that can affect bleeding and poor outcomes in older persons on anticoagulantion.

Abstract Id: CO_55

Amanda Goh, Ooi Seok Ling[1], Khairul Nadiah Ismai'ail[2], Noridah Abdul Muin[3], Siti Zarina Yaakop[3], Suhaida Roselin[3], Nurul Masyitah Syahirah Binti Saharum[3], Chin Ai-Vyrn[3], Terence Ong Ing Wei[3]
[1]Pusat Perubatan Universiti Malaya, [2]Kementerian Kesihatan Malaysia, Universiti Malaya Medical Centre[3]

Title: The Geriatric Virtual Ward Pilot Project in Universiti Malaya Medical Centre

Background: The Virtual Ward(VW) offers hospital-level care at home through a combination of remote monitoring, expedited return to hospital, and online video consultations with the support of a caregiver. Patients are admitted from either the Emergency Department (admission avoidance), or the inpatient wards (early supported discharge).

Aim: Evaluate the Universiti Malaya Medical Centre(UMMC) VW pilot project.

Methodology: A multidisciplinary interprofessional team was assembled consisting of medical, nursing, information technology, legal and managerial staff to drive its implementation, delivery and evaluation. Governance oversight was established. There were two phases of the pilot project (9-31.1.2024, and 26.2.24-ongoing). Patients ≥65 years fulfilling the eligibility criteria which considered their distance from UMMC, illness severity, caregiver availability, and internet accessibility, were considered for admission.

Results: 74/1021 (7.2%) patients screened were eligible. 39/74 (52.7%) patients agreed to VW admission. The most common exclusion reasons were requiring intravenous treatment (35%), input from other specialties (28%), and oxygen supplementation (16%). Those declined attribute to the lack of carer support (42%), various other reasons (40%), lack of confidence in equipment (13%) and concerns about deterioration (5%). 33/39 (84.6%)patients transitioned from inpatient wards, and 6/39 (15.4%)were admitted from ED. The mean(SD) age of VW patients was 78.5(8.2) years with 59% diagnosed with infection. The average VW length of stay (LOS) for all patients was 4 days (range 1-9 days). Among those transferred from wards, their prior inpatient average LOS was 2 days (range 1-35 days). 7/39 (17.9%) patients attended the physical assessment room for venepuncture and 2/39 (5.1%) for general review. 4/39 (10.3%) patients had a planned hospital admission and 1 (2.6%) patient had an unplanned return via ED. No other adverse events were reported. After completing phase 1, participants provided anonymised feedback, with all respondents expressing positive sentiments regarding their VW experience and indicating a willingness to recommend this service to others.

Conclusion: This pilot demonstrated the feasibility and safety of a VW service. The next step is to seamlessly integrate it into routine clinical care, extend its reach beyond the aged population and implement this innovative service across various other specialty.

Abstract Id: CO_56

Siti Aishah Ikmal Hisham[1], Nager Devi Vampanan[2], Rosmaliah Alias[1], Shiau Shuang Gan[1], Vivien Sow Yik Xin[1], Kanthenee Rajasekaran[1], Adelin Yong Sue Wen[1], Cheok Ee Chang[1], Victor Ong Sheng Teck[1], Ammar Kamar[1]
[1]Hospital Kuala Lumpur, [2]Hospital Sultan Idris Shah

Title: The Impact of Pharmacist-Led Medication Reconciliation at Discharge in Older People at Hospital Kuala Lumpur

Background: Older people (OP) are at greater risk of medication-related adverse events (AE), especially at transitions of care where medication errors (ME) may occur. Pharmacist-led medication reconciliation (MR) is a key strategy to improve medication safety at transitions of care by identifying medication discrepancies and MEs.

Aim: To evaluate the types of medication discrepancies and MEs detected among OP and non-OP at discharge. Additionally, to estimate potential savings in medication costs by implementing a pharmacist-led MR using patients' own medications (MR-POMs) in Hospital Kuala Lumpur (HKL) at discharge.

Methodology: An observational cross-sectional study was conducted at adult medical wards of HKL from January-August 2022. Patients were enrolled during office hours (MR group) and after working hours (non-MR group). A structured pharmacist-led MR-POMs process was performed prior to discharge for patients in the MR group. A subgroup analysis was done comparing OP (>59 years old) and non-OP (<60 years old). The primary outcome was number of medication discrepancies detected upon discharge. Data on MEs was collected and potential cost savings was calculated.

Results: 131 patients were equally enrolled in both MR and non-MR groups. 63.4% of patients in MR group were categorised as OP (n=83), compared to 62.6% (n=82) in non-MR group.
MR-POMs detected 47 unintentional medication discrepancies in MR group and 65 unintentional discrepancies in non-MR group. Majority of the unintentional discrepancies occurred in the OP (80.9% in MR group, 58.5% in non-MR group).
There were 76 MEs detected in MR group compared to 60 in non-MR group. Majority of the errors occurred in OP (71% in MR group, 68.3% in non-MR group).
The most common type of ME detected were "significant MEs" (54.5%). The rate of "significant MEs" were significantly higher in OP compared to non-OP (p=0.04).
MR-POMs resulted in an estimated cost saved of RM4,298.79, with costs totalling RM13,147.93 when MR-POMs was not performed.

Conclusion: The OP population is vulnerable to medication-related AE. This study finds that unintentional medication discrepancies and MEs are more prevalent in OP. Pharmacist-led MR was able to contribute to enhanced patient safety and substantial costs savings by detecting potential errors prior to discharge.

Abstract Id: SO_60

Zahira Zohari[1], Nurulakmal Obet[2], Hazwan Mat Din[1], Ng Tyng Sam[2], Pei Jie Khoo[2], Nurul Huda Mohd Zambri[2], Reena Nadarajah[2], Dato' Tunku Muzafar Shah Tunku Jaafar[2]
[1]Universiti Putra Malaysia, [2]Hospital Selayang

Title: Influence of Mobility and Cognitive Change on Survival Outcome in Hospitalized Older Adults

Background: Older adults are frequently hospitalised and experience higher mortality rates due to their susceptibility to multimorbidity. Accurate prognosis prediction for these patients is critical for developing targeted clinical interventions and improving public health outcomes.

Aim: This study aimed to assess the impact of various prognostic factors, including mobility, cognitive function, and health conditions, on the survival outcomes of older adults in an acute medical ward.

Methodology: This retrospective observational cohort study analysed data from 181 patients over 60 years admitted to ward 9D of Hospital Selayang between September 15 and November 31, 2023. Descriptive statistics were presented for categorical and continuous variables. Cox regression analyses were used to determine the relationships between patient characteristics and survival, with time-to-event data calculated from hospital admission to discharge, transfer, or death.

Results: Detailed analysis of the patient demographic and clinical characteristics revealed an average age of 72.46 years among the study participants, with males constituting 63% of the cohort. The most common comorbidities identified were hypertension (75.1%) and diabetes mellitus (57.5%). The prevalence of delirium documented during the hospital stay was 12.2%. Survival analysis demonstrated significant relationships between several factors and mortality outcomes. This study revealed that using mobility aids premorbidly significantly increased mortality risk (HR=6.18, p=0.006). Additionally, those exhibiting cognitive or behavioural changes during admission were at increased risk of death (HR=3.82, p=0.012). Interestingly, the final model revealed a significantly lower risk of mortality with the diagnosis of delirium during admission (HR=0.19; p=0.042).

Conclusion: The findings from this study highlight the significant impact of mobility and cognitive changes on the survival outcomes of hospitalised older adults. Furthermore, the strong protective effect associated with the early detection and management of delirium underscores the critical need for healthcare providers to implement routine screening to reduce mortality risk substantially. This emphasises its role as a health concern and a key indicator of patient safety. These insights advocate for a comprehensive, integrated approach to patient care that prioritises mobility support, mental status monitoring, and vigilant delirium management to enhance survival outcomes for older adults in acute medical settings.

Abstract Id: CP_64

Lee Ai Vuen[1], Ho Yi Bin[1], Reena Nadarajah[1], Nurul Huda Binti Mohd Zambri[1], Tunku Muzafar Shah Bin Tunku Jaafar Laksmana[1]
[1]Hospital Selayang

Title: Impact Of Frailty On Short Term Outcomes In Elderly Patients With Hip Fracture

Background: Hip fractures are associated with mortality, disability, and loss of independence in the elderly. The effect of frailty on hip fracture's outcome is not well established in Malaysia.

Aim: To assess the prevalence of frailty and its impact on short-term outcomes in elderly with hip fracture.

Methodology: A retrospective cross-sectional study of subjects ≥60 years old with hip fracture in the orthopaedic wards between 1st January till 31st December 2023. Frailty was assessed using the clinical frailty scale (CFS). A CFS score of ≥ 5 is considered frail.
The study outcomes were the overall inpatient complication rate, length of stay (LOS) and time to surgery. Complications such as pneumonia, delirium, postoperative anaemia requiring transfusion, cardiac events, sepsis, renal failure, venous thromboembolism, surgical site infection, pressure sore and inpatient mortality were documented. Differences between the frail and the non-frail were identified using chi-square analysis. A value of $P < 0.05$ was considered significant.

Results: 185 subjects with hip fracture were assessed. The majority were female (67.6%). The mean age of the subjects was 77.6 ± 8.14 years. 56.8% were mobile without aids prior to the fracture. 42.2% presented with the first ever fall. 59.5%(n=110) of subjects were classified as frail. Hip fracture surgery was performed on 76.3%(n=84) of frail patients, compared to 81.3%(n=61) of non-frail patients. 24.1% of patients who received surgery were able to ambulate with an aid upon discharge. 21.6% were managed conservatively.
45.4%(n=84) developed complications. Of these, 56 were frail versus 28 non-frail (P=0.079). Pneumonia and delirium were the commonest complications. Delirium demonstrated the strongest association with frailty (P=0.004). On average, frail patients waited 250 ± 239 hours from admission to surgery, whereas non-frail patients waited 174 ± 122 hours (P=0.025). LOS between frail and non-frail patients were 13.1 ± 7.3 days and 12.0 ± 9.3 days, respectively (P=0.371).

Conclusion: Frailty is not uncommon among hip fracture patients. Frailty is associated with an increased risk of delirium and requires significantly longer time to surgery. We found no significant impact of frailty on inpatient mortality and LOS.

Abstract Id: CO_65

Roslawati Ramli[1], Fadhilah Aisyah Ramli[1], Elizabeth Chong[1]
[1]Hospital Kuala Lumpur

Title: Nursing intervention – do they have an impact in inpatient injurious falls?

Background: Report aims to provide an overview of fall incidents of the Medical Department as the highest rates of falls

Aim: Do they have an impact in inpatient injurious falls , Falls are a significant concern in healthcare settings, due to their potential to cause injury and compromise patient safety. This report aims to provide an overview of fall incidents of the Medical Department as the highest rates of falls.

Methodology: Fall incident data over 3 years were collected from the medical department with 22 medical wards with 495 beds, and approximately 1000 staff members. The data was collected via incident reports, patient records and staff interviews. Analysis was conducted to determine patterns, common factors and trends associated with falls.

Results: There were a total of 594 falls in the three-year period. Falls occurred across various age groups, with the majority observed in patients above 60 years with an average total of 70.9%.
Most of the falls occurred in the night shift, with 65% falls occurred at the bedside followed by the toilet 22%. Although majority of fallers have no injury (72%), 2% of the falls led to a major injury inclusive of almost 60% with a fracture (6 lower limb and 1 upper limb fractures), 2 out of the 7 patients died within one year post incident.
5 FIT a nursing initiative was started to prevent falls:
• Implement standardized fall risk assessment tools and tagging of persons with high risk of falls
• Assist patients with high risk of falls for activities
• Provide appropriate walking aids to those who required
• Ensure bed is at correct height and brakes are on
• Foster timely sharing of patient fall risk information and effective coordination of preventive measures
Utilization of these nursing interventions, falls rate has reduced from 0.76 to 0.575 per 1000 bed days.

Conclusion: Falls a significant risk to patient safety. Nurses play a big role in falls reduction in hospital. Addressing contributing factors through targeted interventions, staff education and enhanced communication is essential to minimize fall-related injuries and improve patient outcomes

Abstract Id: CP_66

Khairulanwar Bin Asri
Pusat Jantung Sarawak

Title: The Relationship between Cognitive & Leisure Activity and Life Satisfaction Among Older Person in Community

Background: The relationship between cognitive and leisure activities and life satisfaction among older individuals is complex and multidimensional. Engaging in cognitive activities can lead to enhanced cognitive functioning, which may indirectly contribute to higher life satisfaction. Moreover, research has shown that cognitive activity can positively influence psychological well-being and social interaction, which are important components of life satisfaction. The aim of this study is to determine the cognitive and leisure activities engaged in by older persons in the community in Malaysia. Specifically, the study aims to explore the level of participation in cognitive and leisure activities. Furthermore, it seeks to examine the relationship between cognitive activities, leisure activities; and life satisfaction among older individuals in Malaysia. Cross-sectional study using purposive sampling was conducted for this study. This study consisted of a self-administered questionnaires that were done through questionnaire. The questionnaires consisted of 3 section that are demographic data, instruments called Cognitive & Leisure Activity Scale (CLAS) and Satisfaction with Life Scale (SWLS).

Aim: 1. To identify the level of cognitive and leisure activity among older person in community.
2. To identify the level of life satisfaction among older person in community.
3. To determine an association between cognitive and leisure activity with satisfaction with life satisfaction.
4. To determine an association between cognitive and leisure activity among older person in community with demographic variable (age).
5. To determine the significant differences between cognitive and leisure activity among older person in community with demographic variable (gender, marital status, educational background health background & household income).

Methodology: The sampling technique used in this study was purposive sampling strategy. This study was conducted in the form of a self-administered questionnaire. After the screening, those who passed the screening and meet the criteria was presented with a series of validated questions to fill out in order to collect answers from respondents. A set of validated questionnaires was distributed to respondents via physical form. Respondents was provided with demographic information, signed a consent form, and answered a series of questionnaires. This research tool also offered a brief overview of the study's research objectives as well as a phone number. Moreover, respondents may inquire about any problems experienced when filling out the questionnaires. After respondents have completed the questionnaires, the distribution of the questionnaire was continued until reached the target participants.

The data collection method used in this study was simple and convenient for respondents. This form of data collecting was useful to collect data from a large number of people. Furthermore, respondents had plenty of time to complete the questionnaire and was able to contact us when they faced any problems.

Results: Normality testing done using Shapiro-Wilk was used because is used for sample more than 50 sample. The analysis indicate that most of the data is significant (p<0.05), suggesting the assumption of normality for age (p=0.00) and SWLS total score (p=0.00). From total 210 respondent, the majority of respondents fall within the age bracket of 60-69 years old, categorizing them as the 'young old' population, constituting 54.3% of the sample. Gender distribution is balanced, with 50% male and 50% female respondents. Ethnically, Malay respondents make up the second largest portion at 37.1% after Chinese with 44.8%. The study also highlights a high rate of marital status among respondents, with 88.6% being married. In terms of educational background, 58.6% of respondents have attained education up to the primary level. Health-wise, a significant portion of respondents, 63.8%, reported having comorbid medical illnesses, while 54.3% have a history of medical illness. Furthermore, the study sheds light on the socioeconomic background of the respondents, with 53.8% originating from the M40 household income range, which spans from RM 4,851 to RM 10,970. Cognitive & Leisure Activity Scale (CLAS) questionnaire was administered to 210 elderly participants to assess their participation in cognitive and leisure activities. The results of the Cognitive & Leisure Activity Scale indicate a varied pattern of participation among older individuals in the community. the mean for CLAS is 22.7 and standard deviation is 9.2. The total range for CLAS is 0-80, it shows that lower participation of cognitive and leisure activity among elderly. Meanwhile the mean for SWLS is 27.85 and standard deviation is 5.0. The relationship between participation with cognitive and leisure activity (as measured by Cognitive and Leisure Activity Scale (CLAS)) and life satisfaction (as measured by Satisfaction with life scale (SWLS)) was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. There was a large, positive correlation between the two variables r= 0.56, n=210, p < 0.05. It shows that higher the participation in cognitive and leisure activity, the higher the life satisfaction. The relationship between participation with cognitive and leisure activity (as measured by Cognitive and Leisure Activity Scale (CLAS)) and age was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. There was a medium, negative correlation between the two variables r= - 0.476, n=210, p < 0.05. There is no statistically significant difference in scores for males (M= 23.00, SD= 9.79) and females (M= 22.55, SD= 8.69; t (208) =0.35, p= 0.72 (two-tailed) among elderly. The magnitude of the differences in the means (mean difference = 0.44, 95% CI: -2.07 to -2.97) with small of eta square (0.0006). There was statistically no significant difference in scores for these race age group, F (3, 206) = 2.19, p = 0.09.

Conclusion: The findings from the administration of the Cognitive & Leisure Activity Scale (CLAS) questionnaire among 210 elderly participants reveal a diversified pattern of engagement in cognitive and leisure activities within the community. Analysis of the results demonstrates that conventional cognitive activities such as chess, checkers, and backgammon, along with puzzles like crossword puzzles, jigsaw puzzles, and Sudoku, are less

favored among the respondents, with a significant proportion reporting never engaging in these activities. Similarly, participation in activities like playing cards or board games and engaging in painting, drawing, or other arts/crafts appears to be infrequent. Conversely, there is more consistent involvement in activities such as socializing with friends, attending religious services, and exercising on a monthly basis. Additionally, annual participation is more prevalent in activities such as attending clubs or group activities outside the home, volunteering, and attending cultural events like theater performances, concerts, or exhibitions. Notably, watching TV or listening to music emerges as the most frequently reported daily activity among the elderly participants. These findings suggest a preference for passive leisure activities among older individuals, with intermittent engagement in more socially and culturally oriented pursuits. Such insights could provide valuable guidance for designing interventions aimed at fostering cognitive engagement and enhancing overall life satisfaction among older adults in the community. Furthermore, the results obtained from the Satisfaction with Life Scale (SWLS) shed light on the complex nature of life satisfaction among older individuals. While a substantial proportion of respondents express contentment with their current life circumstances, indicating agreement with statements reflecting fulfillment and satisfaction, there is also a notable portion of participants who express some level of dissatisfaction or a willingness to change aspects of their lives if given the opportunity.

Abstract Id: SO_67

Xiang Jiang XU[1], Phyo Kyaw Myint[2], Shaun Wen Huey Lee[3], Kalavathy Ramasamy[4], Siong Meng Lim[4], Abu Bakar Abdul Majeed[4], Yuet Yen Wong[4], Sumaiyah Mat[5], Nor Izzati Saedon[6], Hazlina Mahadzir[7], Kejal Hasmukharay[6], Maw Pin Tan[1]
[1]Universiti Malaya, [2]University of Aberdeen, [3]University Monash Malaysia, [4]Universiti Teknologi MARA(UiTM), [5]Universiti Kebangsaan Malaysia, [6]University of Malaya Medical Center, [7]Universiti Kebangsaan Malaysia Medical Centre

Title: The Changing Pattern of Anticholinergic Prescribing in a Low- to Middle-income Country: Comparison of Two Datasets

Background: While the effects of anticholinergic drug use have been increasingly highlighted, the trends and patterns of anticholinergic drug use are, however, less well understood.

Aim: To determine the changes in frequency and pattern of anticholinergic drug use within a low- to middle-income country.

Methodology: Comparisons were made between two datasets obtained in 2013-15 and 2020-22 from population-based surveys conducted among Malaysian residents aged 55 years and older. Anticholinergic exposure was determined using the anticholinergic cognitive burden (ACB) tool. The frequency of prescriptions are reported by the Anatomical Therapeutic Classification (ATC) groups.

Results: Medication data were available in 1616 and 2733 participants from 2013-15 and 2020-22 respectively, of whom 293 (18.1%) and 280 (10.2%) participants were on at least one medication with ACB score ≥1. Cardiovascular medications were the most commonly prescribed in both surveys within ATC classes but had reduced over time. The use of nervous system medications, particularly antipsychotics, had increased. The prescription of medications within the alimentary and respiratory classes had reduced. Multivariate analyses found that those interviewed in 2020-22 were significantly less likely than those in 2013-15 to have total ACB score=1-2 (odds ratio [95% confidence interval] = 0.473[0.385-0.581]) and ACB ≥3 (0.251[0.137-0.4600]) compared to ACB=0 after adjustment for potential confounders.

Conclusion: A reduction in anticholinergic exposure was observed over time. However, more types of medications with anticholinergic effects were prescribed with an increase in the prescription of nervous system medications. The increase in antipsychotic use, in particular, is of concern and deserves further evaluation.

Abstract Id: SO_69

Sobiitraa Devii Kumanan[1], Maw Pin Tan[2], Roshaslina Rosli[1], Nor Fazlin Zabudin[1], Xin Ning Wong[1], Spencer Low[3], Sherral Devine[4], Mahdi Khemakhem[4], Rhoda Au[3]
[1]ACT4Health Services and Consultancy, [2]University of Malaya, [3]Boston University School of Public Health, [4]Davos Alzheimer's Collaborative

Title: Usability Challenges of Linus Participant, A Brain Health-Monitoring Smartphone Application Among Malaysian Older Adults

Background: Older adults are becoming devoted smartphone users but mobile health is not widely applied in their daily lives. The rapid increase in smartphone usage and brain health-monitoring smartphone applications shows new possibilities for remote health monitoring in Malaysia. However, adopting this approach among the rapidly growing elderly population may create unique cultural and socioeconomic challenges.

Aim: To examine the usability issues and barriers Malaysian seniors encounter while using Linus Participant.

Methodology: Older adults aged 60 and above from urban and rural communities in Peninsular Malaysia were invited to participate in a community-based health screening and recruited for a two-year Linus Participant smartphone application study for cognitive testing, developed by Linus Health (Boston, Massachusetts, USA) as part of the Davos Alzheimer's Collaborative (DAC). The app consists of thinking and memory tasks, along with physical assessment which evaluates reaction time and accuracy. During the first in-clinic visit, participants would complete a clock drawing test and physical test, continuing the other tests at home with a brochure for reference. The next assessment every three months is to be completed in their homes too. Prior technology experience and health literacy were assessed through the health screening. Feedback forms evaluated the user experience and difficulties faced. Issue queues will be reported and resolved after in-depth discussions.

Results: 816 participants aged above 60 from urban and suburban communities in Peninsular Malaysia have been recruited for the study, with a mean age of 67.92 and 57% female. 66% received tertiary education. Major usability issues include technical problems among non-Apple smartphone users, problems relating to their smartphones (insufficient storage, unsupported phone model etc.), comprehending instructions given in the application, and connectivity problems. Cultural factors like technology anxiety and preference for in-person visits while using the brain health-monitoring application undermined sustained engagement.

Conclusion: To deploy health monitoring apps among Malaysian seniors, addressing technology literacy through customised training in all available local languages is required. Accessible interfaces, connectivity options, and frequent community outreach need to be offered to improve usability. Healthcare providers must be involved to overcome barriers to sustainable smartphone monitoring adoption.

Abstract Id: CP_73

Nurah Zainal Abidin[1], Nur Suriana Abu Bakar[2], Foong Ching Yee[3], Nurin Nabila Najeeb[4], Lina Hazwaniz Dzulkifli[1], Siti Mallissa Mohd Sharif[5], Vishalini Maheswaran[6], Nurizrin Anis Amizan[6], Nurul Husna Sodri[7]

[1]Selayang Hospital, [2]Sungai Buloh Hospital, [3]Hospital Tengku Ampuan Rahimah, [4]PKD Klang, Hospital Sungai Buloh[5], Hospital Banting[6], BPF JKNS[7]

Title: Medication Related Fall Risk in Community-Dwelling Older Adults in Selangor, Malaysia

Background: Falls are a major public health problem worldwide. It is estimated that 28-35% of elderly aged 65 and above fall each year and prevalence of fall in Malaysia was estimated to be 24.5%. Falls among the elderly can be associated with serious complications such as fractures, injuries and death. Medication-induced falls are a significant concern in this age group. These falls can result from various mechanisms such as drowsiness, orthostatic hypotension, vision changes, cognitive impairment and polypharmacy.

Aim: This study is carried out to see the risk of falls among community-dwelling older adults in Selangor and correlate between medication and risk of falls

Methodology: Data was collected prospectively during two occasions in Selangor state during International Day of Older Person 2023. All participants who came to the Pharmacy booth were interviewed using CDC's STEADI Rx form. For those respondents with medications, questions were asked regarding follow up facilities. We then contacted the facilities to get the details of the medications. Simple analysis was done using Microsoft Excel version 2023.

Results: Overall, 104 respondents answered the survey with 82 of them were elderly and 22 were non-elderly. 74 respondents were female. 15 (14.4%) participants had fall with 80% of them being elderly. 60% of the faller were on medications. Fear of falling was the most prominent risk factor for falls, accounting for 56.7% while both instability when standing or walking and postural hypotension were equally proportionate (36.5%). Almost half of the respondents (49%) were on fall risk increasing drugs (FRIDS) There is no correlation between FRIDS and risk of falls.(p=0.217).

Conclusion: Understanding the potential risks associated with medication induced falls is crucial in order to prevent such incidents. This data serves as the baseline community data for Selangor population on fall and FRIDs. It is proven that CDC-STEADI Rx could be used in busy settings such as community healthcare clinic. However data gained is very diluted and superficial. Further in-depth study should be conducted in primary care settings to get the overall picture of medication fall risk

POSTER PRESENTATIONS

Abstract Id: CP_01

Tyng Sam Ng[1], Tunku Muzafar Shah Tunku Jaafar[1], Nurul Huda Mohd Zambri[1], Reena Nadarajah[1]
[1]Hospital Selayang

Title: A Case of Disseminated Tuberculosis with Atypical Presentation in an Older Person

Background: Tuberculosis (TB) is an infectious disease caused by Mycobacterium tuberculosis. It is a significant health concern, with millions of new cases and deaths reported each year. Disseminated tuberculosis (dTB) is a serious condition which can affect various organs and tissues, leading to widespread symptoms and complications. The diagnosis of dTB can be challenging due to its atypical presentations.

Aim: (1) Raise awareness of the disease non specific symptoms

Methodology: Case Report

Results: We present a case of disseminated tuberculosis in a robust older person with unusual symptoms. 75- year-old Chinese gentleman presented to the emergency department in May 2023 with a three-months history of lower back pain, weight loss, and reduced appetite. Patient was treated as age-related disease and subsequently discharged. However, he was attended to emergency after two-months with history of worsening back and physical deconditioning. Investigations done suggestive of dTB and immediate treatment was given.

Conclusion: Disseminated tuberculosis is a life-threatening condition, with a reported mortality of up to 30%. Early detection can significantly reduce morbidity and mortality. Healthcare workers must maintain a high index of suspicion and remain vigilant for TB as starting early treatment will prevent dissemination in the patient, reduce risk to the public and improve outcomes.

Abstract Id: SP_03

Soonia Guna Segar[1], Julie Whitney[2], Devinder Kaur Ajit Singh[1]
[1]Universiti Kebangsaan Malaysia, [2]King's College London

Title: Enablers and Barriers of Community-Based Health Programs for Older Adults: A Scoping Review

Background: As the global population of older adults continues to grow, there is an increasing demand for successful community-based health promotion programs tailored to this demographic. Understanding the enablers and barriers of such programs is crucial for developing effective implementation strategies.

Aim: In this scoping review, our aim was to consolidate existing literature on the enablers and barriers to implementing a community-based health promotion and exercise program for older adults, focusing on strategies for scaling up such programs.

Methodology: Articles addressing the enablers and barriers of implementation for scaling up a community-based health promotion and exercise program for older adults that were published from January 2013 until December 2023 were searched in three data sources (EBSCO Host Medline, The Cochrane Library, and Scopus). A total of 17 articles were included in this scoping review, with the identified enablers and barriers classified under the Consolidated Framework for Implementation Research (CFIR) framework in five domains (1.intervention characteristics, 2.outer setting, 3.inner setting, 4.characteristics of individuals, and 5.process of implementation).

Results: Our review findings revealed the enablers and barriers within the CFIR framework were 1.complexity and adaptation; 2.accessibility, awareness, and recruitment; 3.viability, stewardship, infrastructure, and resources; 4.motivation, baseline predictors, and inclusivity and 5.effective engagement, partnership, evaluation, optimization, training, responsiveness, adherence, retention, and planning. Our review did not uncover issues such as readiness, cost, self-efficacy, and fidelity.

Conclusion: Innovative strategies and approaches are essential to facilitate the implementation and scaling up of community-based health promotion and exercise programs among older adults.

Abstract Id: CO_04

Lee Kian Hong[1], Hazlina Mahadzir[1], Rizal Abdul Rani[1], Mohd Rizal Abdul Manaf[1], Sing Yee Ng[2]
[1]HUKM, [2]HSI

Title: Enablers and Barriers of Community-Based Health Programs for Older Adults: A Scoping Review

Background: As the global population of older adults continues to grow, there is an increasing demand for successful community-based health promotion programs tailored to this demographic. Understanding the enablers and barriers of such programs is crucial for developing effective implementation strategies.

Aim: In this scoping review, our aim was to consolidate existing literature on the enablers and barriers to implementing a community-based health promotion and exercise program for older adults, focusing on strategies for scaling up such programs.

Methodology: Articles addressing the enablers and barriers of implementation for scaling up a community-based health promotion and exercise program for older adults that were published from January 2013 until December 2023 were searched in three data sources (EBSCO Host Medline, The Cochrane Library, and Scopus). A total of 17 articles were included in this scoping review, with the identified enablers and barriers classified under the Consolidated Framework for Implementation Research (CFIR) framework in five domains (1.intervention characteristics, 2.outer setting, 3.inner setting, 4.characteristics of individuals, and 5.process of implementation).

Results: Our review findings revealed the enablers and barriers within the CFIR framework were 1.complexity and adaptation; 2.accessibility, awareness, and recruitment; 3.viability, stewardship, infrastructure, and resources; 4.motivation, baseline predictors, and inclusivity and 5.effective engagement, partnership, evaluation, optimization, training, responsiveness, adherence, retention, and planning. Our review did not uncover issues such as readiness, cost, self-efficacy, and fidelity.

Conclusion: Innovative strategies and approaches are essential to facilitate the implementation and scaling up of community-based health promotion and exercise programs among older adults.

Abstract Id: SO_07

Shobha Mirchandani[1], Maw Pin Tan[1], Karen Morgan[2]
[1]University Malaya, [2]RCSI & UCD Malaysia Campus

Title: Prevalence and Characteristics of Depression, Anxiety and Stress Among Older Malaysians during COVID-19 Pandemic

Background: The coronavirus disease (COVID-19) pandemic has impacted the physical and mental well-being of people worldwide. This study intends to explore and address the prevalence and characteristics of depression, anxiety and stress among Malaysians aged 60 years and over during the COVID-19 pandemic.

Aim: To understand the psychological health of older persons and characteristics that influence their mental health during the COVID-19 pandemic.

Methodology: Quantitative data was obtained from the TrAnsforminG CognitivE Frailty into Later-LifE Self-Sufficiency (AGELESS) study. Depression, anxiety and stress were measured using the Geriatric Depression Scale, Depression Anxiety and Stress Scale- Anxiety domain, and the Perceived Stress Scale respectively. Individual items in the scale were studied to understand the association between items and depression, anxiety and stress levels.

Results: Depression, anxiety and stress data were available for 1354 participants of whom 200 (14.8%) had depression, 148 (11%) mild and 52 (3.8%) moderate to severe. Of the 77(5.7%) who reported anxiety, 40 (3%) were mild and 37 (2.7%) had moderate to severe symptoms. Over one fifth, 294 (21.7%) of participants reported mild to severe stress.

Conclusion: Compared to pre-existing pre-pandemic data on depression, the level of depression among Malaysians aged 60 years and over has increased over the COVID-19 pandemic. Future studies should seek to determine the factors which increase the risk of adverse psychological effects among older adults during major life-changing effects in order to develop effective prevention strategies for such events, to which older adults are particularly susceptible to.

Abstract Id: SP_08

Malarkodi Suppamutharwyam[1], Reena Nadarajah[1], Tunku Muzafar Shah Tunku Jaafar Laksmana[1]
[1]Hospital Kuala Lumpur, [2]Hospital Selayang

Title: Stopping the Domino Effect: Identifying Populations at Risk for Missed Anti-osteoporosis Treatment Following Hip Fracture

Background: Osteoporosis is a growing public health issue. Screening and managing osteoporosis is often only considered when patients present with fragility fractures.

Aim: To evaluate the prescription rate of anti-osteoporosis medications and to identify factors associated with patients not receiving anti-osteoporosis medication following fragility hip fractures.

Methodology: A retrospective review was conducted on the charts of 149 patients, aged 65 years old and above, admitted with fragility hip fractures to Selayang General Hospital between January 1, 2022, and February 28, 2023.

Results: In total, 149 patients with fragility fractures were eligible for the study (mean age: 78 years), with the majority (75%) being female. Only 84 patients (56%) received anti-osteoporosis medication at discharge following fragility hip fractures. Among those who received anti-osteoporosis medications, 94% were prescribed bisphosphonates, while the remaining 6% were prescribed denosumab. 37% (p-value 0.002) of patients with severe systemic disease and significant functional limitations, i.e., ASA 3, did not receive anti-osteoporosis medications at discharge. Moreover, 31% of patients with chronic kidney disease stage 3-5 (p-value < 0.001) did not receive an anti-osteoporosis prescription at discharge. Surgical management influenced the prescription of anti-osteoporosis medications, with nearly 50% of patients who received conservative management (p-value < 0.001) not being prescribed anti-osteoporosis medications upon discharge. Among the cohort of patients who did not receive anti-osteoporosis medications, almost 83% (p-value < 0.001) of patients received calcium supplements and vitamin D at discharge. Discharge destinations did not significantly influence the prescription of anti-osteoporosis medications. Among those who received the medications, 79% were discharged home, 17% returned to a nursing home, and 5% were admitted to a rehabilitation unit. In comparison, for those who did not receive anti-osteoporosis medications, 82% were discharged home, 8% returned to a nursing home, and 6% were admitted to a rehabilitation unit.

Conclusion: Patients receiving anti-osteoporosis medications immediately following fragility hip fractures in Malaysia remain low at 56%. Improved healthcare providers' attitudes, knowledge of osteoporosis, and better communication among the team members might enhance the treatment rate. Facilitating access to medications such as denosumab and zoledronic acid would help improve the rate of treatment initiation and compliance following fragility hip fractures.

Abstract Id: CP_09

Shin Wuei Tan[1], Jun Ni Keng[1]
[1]Hospital Seberang Jaya

Title: Association of Charlson Comorbidity Indices (CCI) with Fracture-related complications and In-Hospital Mortality in Fragility Hip Fractures

Background: Fragility hip fractures are common in the older patients, most patients have multiple comorbid illnesses. Studies show that CCI is a consistent dominant factor in predicting short and long-term mortality. [1,2] We hypothesize that a higher CCI portends a higher risk of developing fracture-related complications and in-patient mortality.

Aim: The objective is to investigate the association of CCI with fracture-related complications and factors affecting in-patient mortality.

Methodology: In this retrospective cohort study, we involved 125 patients aged 60 years old and above with fragility hip fractures admitted to Hospital Seberang Jaya between November 1st 2022, and December 31st 2023. Data was collected from medical report.

Results: In our 125 patients, the mean age was 75.6 years (SD 8.0) (60–94 years old), and the mean CCI of patients was 3.9 (SD 1.0). In our study, the most common fracture-related complications were infection (16.8%, n = 21) and delirium (12.2%, n = 15). The CCI score showed a significant association with infection in hip fracture patients, with a CCI mean score of 4.29 (0.96, $p = 0.034$). Our in-patient mortality is 7.2% (n = 9). By using logistic regression, venous thromboembolism (VTE), cardiac events and infections showed a statistically significant (p value <0.05) increased risk of in-patient mortality for hip fracture in older patients.

Conclusion: According to our study, a CCI score of 4 or more is associated with a higher risk of infection but not with in-patient mortality. Other study showed higher CCI score predicted higher in-patient mortality.This could be a factor in the study's small sample size. The risk of in-patient mortality increases in older patients with hip fractures after they experience post-fracture complication such as infection, VTE and cardiac event similar to other study [4]. Therefore, older patients with fragility hip fractures who are multimorbid should be referred earlier, and optimally cared for pre and postoperatively.

Abstract Id: CP_11

Rosdina Zamrud Ahmad Akbar[1], Tan In Jiann[1]
[1]Hospital Kuala Lumpur

Title: Raised Serum Alkaline Phosphatase (ALP) Levels: Clinical Characteristics and Manifestations in Hospitalized Older Adults

Background: Older adults often present with atypical symptoms which makes it challenging for the diagnosis and management of common diseases. Any significant rise of the serum ALP in older adults should be reviewed in the context of the presenting history, physical examination, blood investigations, and relevant radiological studies to make a definite diagnosis. We present 3 older adults with raised serum ALP levels with uniquely different and challenging clinical scenarios.

Aim: Identify the source of the raised serum ALP.
Review the health implications of raised serum ALP on the management of common complex medical conditions in older adults.

Methodology: Descriptive retrospective review of hospitalized older adults with raised serum ALP levels.

Results: A raised serum ALP without a significant corresponding rise in bilirubin can occur in cases of localized cholestasis.
In the context of osteomyelitis, the attempts to repair the damaged bone with an increase in osteoblastic activity and the restoration of the surrounding wound could lead to raised serum ALP levels
Sepsis-induced cholestasis is a diagnosis of exclusion.

Conclusion: Identifying the aetiology of the raised serum ALP in older adults remains a challenge as this vulnerable group may present with atypical and non-specific symptoms. Raised serum ALP levels should be interpreted holistically.

Abstract Id: SO_12

Ruziaton Hasim[1], AbdulKarim Samaeng[1], Akehsan Dahlan[2], Ruhana Samaeng[1]
[1]University Fatoni, [2]Universiti Teknologi MARA

Title: Development and Validation of Islamic Values-Based Cognitive Stimulation Intervention for Older Persons with Dementia: A Conceptual Framework

Background: Dementia presents a significant public health challenge in Malaysia, with a growing prevalence among aging populations. Culturally sensitive interventions tailored to the needs and values of diverse communities are essential for effective dementia care. The prevalence of older people with dementia is increasing, necessitating innovative approaches to address their unique needs.

Aim: This conceptual paper proposes the development and validation of a Cognitive Stimulation Intervention (CSI) based on Islamic values to enhance cognitive function and well-being among individuals with mild and moderate dementia in Malaysia. Certain sentences in Al-Quran and hadith outline some Islamic principles that can be used to prevent dementia, providing a rich foundation for culturally relevant interventions.

Methodology: Drawing upon Islamic teachings, cultural norms, and evidence-based practices in dementia care, the paper outlines a framework for designing, validating, assessing feasibility, and finally evaluating the effectiveness of the intervention.

Results: The proposed CSI aims to integrate Islamic principles and remembrance of Allah into cognitive stimulation activities to promote cognitive function, emotional well-being, and spiritual enrichment in individuals with dementia.

Conclusion: By aligning with cultural and religious values, the CSI seeks to address the unique needs and preferences of Muslim communities in Malaysia and contribute to the advancement of culturally appropriate dementia care interventions. This approach leverages the wisdom embedded in Islamic teachings to offer holistic support for individuals affected by dementia, thereby enhancing the quality of care and quality of life for this population.

Abstract Id: CP_14

Xiu Xin Teng[1], Jun Ni Keng[1], Shin Wuei Tan[1], Shantakumari Arivayagan[1], Dasera Raj Vedha Raj[1]
[1]Hospital Seberang Jaya

Title: A Case of Drug Induced Oral Erythema Multiforme in a 92-Year-Old Man

Background: Erythema multiforme (EM) is an immune-mediated mucocutaneous condition characterized by the appearance of 'target-like' lesions. Oral EM is a distinct but less well-recognized variant of EM. Patients present with oral and lips ulceration typical of EM but without any skin lesions.

Aim: -

Methodology: A 92-year-old man presented with complaints of fever, left upper limb pain and swelling for three days duration. A diagnosis of left upper limb cellulitis was made and intravenous ceftaroline was commenced as the antibiotic drug of choice. 10 days later, his cellulitis improved, however he complained of painful mouth and could not tolerate any solid food or drink. Extraoral examination showed irregular ulcerations, cracking and fissuring over lower lip. Intraoral examination showed multiple, irregular ulcerations with yellow based plagues and erythematous borders on the buccal mucosa, palate, dorsal and ventral surfaces of the tongue. The sudden onset, positive drug history, extensive ulcerations of the oral cavity without any skin lesion led to a diagnosis of oral EM. The Serum Herpes Simplex Virus (HSV) IgM test was negative.

Results: The offending drug was stopped immediately. The patient was advised not to use denture temporarily. The special care dentistry team de-sloughed the oral lesions gently with diluted Difflam-C solution (Benzydamine hydrochloride 0.15%, Chlorhexidine gluconate 0.12%) daily and prescribed sodium hyaluronate oral gel three times a day. Nurses-in-charge ensured patient had good oral care with regular application of Gengigel Hydrogel mouth rinse. The dietitian prescribed cold and soft diets, like ice-cream, with addition of oral nutrition supplement to help patient receive adequate calories and nutrition. The patient subsequently improved and the oral ulcers resolved without any foreseeable long-term sequelae.

Conclusion: Oral EM is rare but has significant implications in older patients, hence early diagnosis, prompt management and proper follow up is important. This case highlights the multidisciplinary team management and person-centered care approach in older patient care.

Abstract Id: CO_16

Heng Wei Moh[1]
[1]Remedy Melody Therapy Resources (Music Therapy)

Title: Music Therapy & Elderly Population in Malaysia

Background: Board-Certified Music Therapy (MT-BC, USA), NICU Music Therapy certified (NICU-MT)

Aim: To introduce and educate public on what is music therapy and how it can benefit elderlies and geriatric population.

Methodology: Through compelling case studies, we will examine how music therapy interventions promote the well-being of both patients and their families, offering bonding opportunities and comfort during end-of-life care.
1. Alzheimer's – goal is to give the best end of life care and support.
2. Parkinson's – to maintain speech and communication.

Results: Music therapy stands as a vital resource for enhancing the well-being and quality of life among the geriatric community. It uniquely combines scientific rigor with artistic expression, engaging multiple regions of the brain and fostering connectivity between the left and right hemispheres. Cultural diversity and religious perspectives influence music preferences, impacting familial caregiving dynamics and end-of-life approaches in Malaysia as well.

Conclusion: Based on the United Nations definition, Malaysia has become an ageing society. Malaysia is not yet to prepared to meet the needs of ageing population. The music therapy profession is still not widely known to public in Malaysia, and more advocacy work to be done.

Abstract Id: SP_18

Schee Li Kwa[1], Bui Khiong Chong[2], Hwei Sung Ling[3], Zhun Foo Tan[1], Kee Wei Janice Wong[2], Kok Choon Cheah[4]
[1]Hospital Sri Aman, [2]Sarawak Heart Centre, [3]Universiti Malaysia Sarawak, [4]Hospital Sarikei

Title: Guideline-Directed Medical Therapy in Heart Failure in Older Adults; Any Differences in varies age group?

Background: Older people are under-represented in large randomised clinical trials due to frailty, multiple comorbidities and outcome less predictable. It is unknown whether Guideline-directed medical therapy (GDMT) will show similar efficacy in improving survival in older adults with heart failure(HF).

Aim: To investigate the clinical characteristics, prescription pattern, and 3 months outcome for older adults with HF.

Methodology: The Sarawak Heart Failure (SarawakHF) registry consecutively enrolled 578 patients from 10 tertiary hospitals in Sarawak via a retrospective study. 176 (30.4%) were aged 65 and older. 119 patients with complete data of at least 3 months follow up from the registry from 1st Jan 2021 till 30th June 2023 were analysed

Results: The patients were stratified into 3 groups: 47% were youngest old (ages 65-70 years); 31% were middle-old (71-75 years old) and 22% were oldest-old(>75 years old).With increased age, the Male ratio reduced (80% vs. 70% vs. 54%, P=0.046). There were no difference among the comorbid like hypertension, diabetes mellitus, dyslipidaemia, ischemic heart disease, atrial fibrillation and stroke in the 3 groups. The prevalence of chronic kidney disease were significantly increase with age (21% vs. 35% vs. 62%, P=0.010). History of HF admission rate among 3 groups is high especially in oldest-old (55% vs. 60% vs. 70%). The HFrEF ratio were lower in middle-old and oldest-old group (88% vs. 62% vs. 69%, P=0.024). There were no different in term of GDMT prescription among the 3 groups. Majority of patients able to titrate up to 3 or 4 pillars of GDMT by 90 days among the 3 groups (83% vs. 79% vs. 75%). There were no different in improvement of functional class among 3 groups. Majority of them able to achieve NYHA 1 or II by 90 days among 3 groups (94%vs. 93% vs. 84%). The 90 days readmission (9% vs. 14% vs. 15%, P=0.647) and 90 days all-cause mortality (2% vs. 5% vs. 0%, P=0.359) among the 3 groups were no different.

Conclusion: Older adults with HF, even in oldest-old group with multiple comorbidities show trend to tolerate at least 3 pillars and favourable outcome

Abstract Id: SP_20

Malarkodi Suppamutharwyam[1], Elizabeth Gar Mit Chong[1]
[1]Hospital Kuala Lumpur

Title: Fracture Crossroads: Unveiling Factors for Surgical vs. Conservative Approach in Hip Fractures

Background: Fragility hip fractures pose a growing concern for aging populations. Increased life expectancy leads to more older patients with complex multimorbidity presenting with hip fractures, creating a challenge for ortho-geriatricians to determine optimal treatment.

Aim: This study examines factors influencing decision-making in older persons with fragility hip fractures.

Methodology: We retrospectively analysed 477 patient records (2019-2023) at Hospital Kuala Lumpur, coinciding with FLS implementation.

Results: Among 477 patients with fragility hip fractures treated between 2019 and 2023, 80% received operative intervention. The highest operative rate was in 2019 (88%) and lowest operative rate was in 2020 (77%). Patients over 90 years old were more likely to receive conservative treatment (8%) compared to younger patients (p-value 0.379). A high proportion of patients who underwent surgery (89%) were admitted from their homes, while a similar proportion (3%) came from residential care in both operative and conservative groups (p-value 0.05).
Functional status significantly influenced the treatment decisions. Patients with independent pre-fracture mobility had a higher likelihood of receiving surgery (67%) compared to those who required walking aids (50%) with p-value of 0.02. Patients receiving operative intervention had higher prevalence of co-morbidities (80% vs 74% in conservative). Interestingly, ischemic heart disease (16% vs. 13% in operative), dementia (8% vs. 3% in operative), and osteoporosis (11% vs. 7% in operative) were reported to be more frequent in conservative group.
The mean length of hospital stay was 13 days for operated, whereas 15 days for conservative group. The mean waiting time for surgery was 7.2 days, with a lack of operating room availability identified as a major factor for delay.
The operative group experienced higher rates of complications (p-value < 0.001) compared to conservative group. Delirium (5.0% vs. 9.5% in operative), infection (5.0% vs. 7.0% in operative), and cardiac events (2.0% vs. 3.0% in operative) were all more frequent following surgery.

Conclusion: Surgery dominates fracture care in older adults, but age, pre-fracture mobility, and co-morbidities influence choice. Future research needed to understand longer stays in conservatively managed patients and higher complications in surgically treated ones. This will bridge knowledge gaps for optimal care.

Abstract Id: CP_24

Su Wei Wan[1], Lina Choe[1], Gretel Jianlin Wong[1], Wee Ling Koh[1], Janelle Ng[1], Wee Hian Tan[2], Joanna Li Xin Ooi[2], Jacquelyn Melody[2], Jerrald Lau[1], Ker Kan Tan*[12]
[1]National University of Singapore, [2]National University Health System (NUHS)
*Corresponding author

Title: Predictors of telemedicine adoption among community-dwelling older adults with chronic diseases: a multi-site cross-sectional study

Background: Telemedicine adoption among older adults is poor despite it being widely advocated for post-COVID-19.

Aim: To examine the characteristics and determinants of telemedicine acceptance among older adults with chronic diseases in the primary care setting.

Methodology: This multicentre cross-sectional study involved 200 conveniently sampled community-dwelling older adults ≥ 65 years receiving follow-up care for chronic diseases at two primary healthcare institutions. Telemedicine acceptance and perception were measured by the Unified Theory of Acceptance and Use of Technology (UTAUT) and Service User Technology Acceptability Questionnaire (SUTAQ) respectively. Multivariate linear regressions were used to identify the predictors of telemedicine intention-to-adopt behavior (UTAUT-BI), which was the primary outcome of the study.

Results: Older adults reported moderate levels of telemedicine acceptance and perception. Almost half of them (49%) were keen to integrate telemedicine into their existing care processes. Greater acceptability was found among those with higher monthly household income. Increased utilisation intentions were also associated with high performance expectancy, effort expectancy, social influence, facilitating conditions and positive perceptions of technology (all $p < 0.05$). Enhanced care was the strongest predictor of older adults' telemedicine acceptance.

Conclusion: As older adults embrace this new care delivery modality, continued efforts to maximise its potential benefits and eradicate uptake barriers are needed. Strategies accentuating its value by bolstering the delivery of patient-centric coordinated care will be helpful, bearing in mind that socioeconomic conditions may also affect its eventual adoption.

Abstract Id: CP_25

Gretel Wong[1], Lina Choe[1], Janelle Ng[1], Wee Ling Koh[1], Nik Ilya[1], Ker-Kan Tan*[1]
[1]National University of Singapore
*Corresponding author

Title: Supporting Seniors through COVID-19: Perspectives from Community Service Providers and Seniors

Background: The COVID-19 pandemic disrupted lives across the world. Social distancing and lockdowns meant to break the chain of infection also halted socialisation. Many measures target senior-centric services due to their vulnerability to COVID-19. Though an integral point of connection for seniors to their community, community service providers' (CSPs) outreach and engagement were largely hampered by the measures.

Aim: This study aims to understand from the perspectives of CSPs, the challenges they face and how we can better support them.

Methodology: Focus group discussions and in-depth interviews were conducted with CSPs and seniors across Singapore. Thematic analysis was performed, and data triangulation was used to explain the themes which emerged.

Results: Three main themes emerged. 1) The impact on CSP's daily operations. Their physical engagements with seniors was scaled-down to assist seniors who were most affected, whilst pivoting to tele-engagement for the other seniors. 2) CSP's continued engagement allowed them to have a unique perspective of protective and risk factors exhibited by seniors, priming them to identify seniors most at risk of adverse impacts. 3) Outside of their usual job scope, CSPs played an integral role in encouraging vaccination, further highlighting their important connection to seniors.

Conclusion: This study reinforces that CSPs are an important pillar in seniors' socialisation. They not only directly engage with seniors, but facilitate the community's engagement with seniors as well. COVID-19 only spotlighted their significant role in engaging seniors and underscored that measures should be put in place to ensure their smooth operation during crises.

Abstract Id: CP_26

Hwei Wern Tay[1], Chong Ciek Goh[1], Nor Hakima Makhtar[1], Ungku Ahmad Ameen Ungku Mohd Zam[1]
[1]Hospital Tengku Ampuan Rahimah

Title: Managing the Maze: A Case Study on Idiopathic Normal Pressure Hydrocephalus in the Elderly

Background: Idiopathic Normal Pressure Hydrocephalus (INPH) presents diagnostic challenges, particularly in the elderly, due to symptom variability and resemblance to other age-related conditions. Shunt surgery, while offering potential treatment, varies in effectiveness and carries risks, often leading patients to avoid surgery due to uncertainty about outcomes. This case study explores diagnostic hurdles in a 77-year-old man with INPH and demonstrates post-shunt surgery improvements in cognitive and mobility functions.

Aim: This case study explores diagnostic hurdles in a 77-year-old man with INPH and demonstrates post-shunt surgery improvements in cognitive and mobility functions.

Methodology: Case: A 77-year-old man with hypertension, diabetes, and dyslipidemia presented with subacute gait instability and short-term memory impairment. Neurological examination revealed lower limb weakness and down-going Babinski reflexes. CT brain showed ventricular dilatation suggestive of NPH. Initial lumbar puncture showed normal opening pressure and CSF characteristics, but lacking proper cognitive and mobility assessments pre- and post-procedure, thus the diagnostic dilemma. Following a second lumbar puncture and CSF drainage, significant cognitive and mobility improvement was observed, confirming INPH diagnosis. Successful shunt surgery followed by inpatient rehabilitation subsequently resulted in improved ambulation and cognitive function.

Results: Discussion: Normal pressure hydrocephalus (NPH) poses a rare but reversible cause of dementia, often underdiagnosed due to the absence of classic symptom triads and lack of standardized diagnostic criteria. This case highlights diagnostic challenges in the elderly, where symptoms may not manifest simultaneously, necessitating multidisciplinary evaluation. Repeated lumbar puncture and subsequent improvements support INPH diagnosis and reinforces shunt surgery's therapeutic potential. In addition, advanced age should not deter consideration for shunt surgery, as guidelines indicate that older age is not associated with a poorer response to shunting. However, potential complications emphasize the importance of careful risk-benefit assessment and ongoing multidisciplinary management for NPH among our elderly patients.

Conclusion: This case highlights the diagnostic and management challenges of INPH in the elderly, emphasizing the importance of thorough clinical assessment for precise diagnosis. Since CSF diversion procedures hold promise for treatment, patients should be encouraged for shunt surgery and age should not deter consideration for shunt surgery. However, it is also essential to carefully weigh risks and respect patient preferences.

Abstract Id: CP_27

Ewe Jin Koh[1], Ee Ling Lai[1]
[1]Hospital Taiping

Title: "Get It Right the First Time"; Diagnostic Joint Aspiration among Hospitalized Elderly Patients with Polyarthritis.

Background: The elderly patients are prone to polypharmacy. Frequently, these patients are on multiple medications targeted at individual symptoms, without addressing the underlying aetiology. This leaves them susceptible to harm from future iatrogenesis and also potential prescribing cascade.
Polyarthritis, manifesting as joint pain and swelling is a common example of such a scenario. A careful history, physical examination and an objective bedside diagnostic tool during the hospitalization will assist in elucidating the aetiology of polyarthritis, and guide treatment decisions. This in turn will lower the risk of potential unnecessary and unproven treatments.

Aim: To analyze a cohort of elderly hospitalized patients who developed acute polyarthritis during their hospital stay. All patients had a diagnostic knee joint aspiration performed to confirm the underlying aetiology.

Methodology: 20 elderly patients hospitalized from January to December 2023 with acute polyarthritis were included in this study. All synovial fluid samples were verified and confirmed by a rheumatologist using polarized light microscopy. The demographics, causes of hospitalization, and potential complications of the knee joint aspiration were included. Descriptive statistics were used to present the data.

Results: The mean age of patients analysed was 70.2 (S.D 5.5). The vast majority of patients were male (80%). Gout was the predominant diagnosis in 15 patients (75%), followed by calcium pyrophosphate disposition disease (CPPD) in 3 patients (15%). 1 patient had no identifiable crystals seen on polarized light microscopy and was diagnosed as knee osteoarthritis. The main reason for hospitalization was for acute decompensated heart failure. None of these patients had been diagnosed with acute polyarthritis prior to the current hospitalization. No complications were reported by the patients on discharge.

Conclusion: Acute polyarthritis can manifest during hospital admissions in the elderly. Diagnostic large joint aspiration is a safe and simple procedure. The acute hospitalization is a good window of opportunity to attain an accurate diagnosis to optimize treatment and subsequently reduce the risk of polypharmacy and iatrogenesis.

Abstract Id: CP_28

Chong Shiau Chin[1], Farhanah Muhamad Ali[1], Goh Suk Fang[1], Nur Auni Nabilah Md Natar[1], Ng Chai Chen[1]
[1]Hospital Sultan Ismail

Title: Anticholinergic Burden and Health Outcomes among Malaysian Geriatric Patients Discharged from Hospital

Background: Studies have shown the use of anticholinergic drugs in geriatric patients is associated with higher risk of falls, cognitive, physical and functional impairment. Previous studies examining the association between anticholinergic burden (ACB) and mortality or hospital admissions found inconsistent results. Little is known about the ACB and its health outcomes among Malaysian geriatric patients.

Aim: We aimed to investigate the ACB and its association with fall, recurrent hospitalisation and mortality in elderly patients discharged from hospital.

Methodology: This was a prospective single-centre study with patients aged 60 years and older admitted to geriatric and medical wards at Hospital Sultan Ismail Johor Bahru were screened for their discharge medications. Patients who were prescribed with at least one medication with anticholinergic properties were recruited. The ACB of each patient at discharged was assessed by the Anticholinergic Drug Scale (ADS). At six-month follow up from discharge, patients or their caregivers were interviewed on the incident of falls, recurrent hospitalisation and mortality.

Results: A total of 61 patients with a median (IQR) age of 71 (66, 76.5) years old were recruited. The median (IQR) length of hospital stay was 5 (3, 9.5) days. A total of 51 (83.6%) patients were discharged with one medication with anticholinergic properties, 6 (9.8%) patients took two medications with anticholinergic properties and 4 (6.6%) patients were prescribed three medications with anticholinergic properties. An ADS score of 1 was observed in 51 (83.6%) patients, 4 (6.6%) patients had an ADS score of 2, 5 (8.2%) patients scored 3 and 1 (1.6%) patient had a total ADS score of 4. The most commonly prescribed medicines with anticholinergic properties were level 1- mild (n=63, 90%), followed by level 3- severe anticholinergic (n=2, 2.86%) and level 2-moderate anticholinergic (n=1, 1.43%). The most commonly used anticholinergic medications were frusemide (n=31, 44.3%) followed by morphine (n=11, 15.7%) and theophylline (n=9, 12.9%). There was no significant association between ACB and falls, rehospitalisation and mortality.

Conclusion: We found no association between ACB and falls, rehospitalisation and mortality in elderly patients at six months after discharge. Further study on this population is needed to clarify this aspect.

Abstract Id: CP_29

Seok Ling Ooi[1], Mae Ching Goh[1], Suhaida Roselin[1], Khairul Nadiah Ismail'ail[1], Noridah Muin[1], Siti Zarina Yaakop[1], Nurul Masyitah Syahirah Saharum[2], Ai Vyrn Chin[3], Ing Wei Ong[3]
[1]Universiti Malaya Medical Centre, [2]UM Health @Virtual Project UM, [3]Universiti Malaya

Title: The Universiti Malaya Medical Centre Geriatric Virtual Ward service: a case series

Background: A virtual ward (VW) brings inpatient care to the patient's home. It utilizes remote monitoring, virtual consultations and caregiver support. This allows recovery at home, avoids hospital associated complications and minimizes physical hospital utilization.

Aim: These cases aim to provide examples of what a novel geriatric VW service can deliver at the Universiti Malaya Medical Centre (UMMC).

Methodology: Two cases were selected to illustrate this. The VW proactively screens for eligible patients from the Emergency Department (ED) and medical wards. Eligibility takes into account their distance from UMMC, illness severity, caregiver availability and internet accessibility. Recruitment, consent and training (service, equipment, treatment processes and escalation pathway) are provided by the VM team.

Results: Madam P, a 77 year old presented to the ED with pneumonia and was identified for admission with intravenous antibiotics and concerns about her risk of deterioration due to her age. She was reviewed by the VW team and her risk stratified as low severity pneumonia. Patient and family agreed to transfer to the virtual ward with oral antibiotics, vital monitoring using devices connected to a Wifi and a gateway device that transmits data onto an online dashboard and daily video consultation. Any issues were communicated with the VW nurse via phone and messaging service. The VW can substitute low risk patients hospital level care in their own homes through an admission avoidance model.
Mrs S, an 85 year old was receiving intravenous diuretics and supplementary oxygen on the ward for pulmonary oedema. Prior to converting her intravenous diuretics to oral at a dose higher than her usual, and because she was still requiring oxygen supplementation, she was reviewed and subsequently recruited by the VW. The VW service titrated her diuretics untill her usual dose, gradually reduced her home oxygen requirement and arranged for expedited blood tests. The VW was able to provide early supportive discharge from the hospital.

Conclusion: UMMC's VW service can be an effective and safe service to complement existing hospital care.

Abstract Id: CP_30

Teoh Keang Tat[1], Muhammad Nuh Bin Idy Razlan[1]
[1]Ministry Of Health Malaysia

Title: Decoding Dangers: Analysing Fall Prevalence and Risk Factors Among Elderly Patients at Tertiary Hospital

Background: For the elderly population, falls represent a common and crippling difficulty that frequently results in significant morbidity and higher death rates. Nonetheless, there are many facets to the fall problem, and a wide range of risk factors add to its complexity.

Aim: The aim of this study is to assess the prevalence of falls and determine the factors that contribute to them among elderly patients admitted to Ipoh Government Hospital.

Methodology: A convenience sample approach was used in this cross-sectional study of 188 hospitalized elderly who were 60 years of age or older in 2024. We gathered information on fall profiles, intrinsic/extrinsic risk factors, and sociodemographic using a modified interviewer-administered questionnaire. The analysis was done with SPSS V22.0.

Results: 92 (48.9%) of the 188 senior patients had falls within the previous year; their average age was 74.2. Of those who reported falling, 46 were men, and the Chinese ethnic group reported the greatest numbers (n=35, 38.0%). 48 fallers (52.2%) reported having fear of fall post fall. Using Chi-square, significant correlations were found ($p<.05$) between the self-reported symptoms (unsteadiness, postural giddiness) and falling. Falling was also substantially correlated ($p<.05$) with intrinsic characteristics including comorbidities (Parkinson's disease, orthostatic hypotension) and specific drugs (Alpha-blocker antihypertensives, benzodiazepines, opioids, antipsychotics, antidepressants, and sedative antihistamines). Among the environmental hazards that contributed significantly to falls were uneven and slippery flooring, a lack of handrails, poor lightning, and the use of walking aids ($p <.001$). Subsequent analysis using multiple logistic regression demonstrated that the likelihood of falling rose by 2.39 times for every extra self-reported symptom. In comparison to individuals without these hazards, those with poor lighting and uneven floors had 4.37 and 6.00 times higher odds of falling, respectively.

Conclusion: The critical problem of falls among elderly patients at Ipoh Government Hospital is highlighted by our study. Certain drugs, comorbidity and environmental risks have been identified as important factors in falls. In order to reduce these hazards and improve patient safety, tailored interventions are essential.

Abstract Id: CP_31

Nor Aniza Md Jidon[1], Nur Fadhilah Jaafar[1], Nor Adira Abd Hadi[1], Hui Loo Tan[1], William Wei Kiat Lee[1]
[1]Hospital Melaka

Title: Educational Workshop's Influence on Nurse Confidence in Older Adult In-patient Delirium Care: Pre-test, Post-test Study

Background: Delirium, characterized by acute neuropsychiatric symptoms, frequently manifests as an initial indication of acute hospital admission in older adult. It is highly prevalent in older patients across various settings of care. Delirium correlates with increased risk of adverse outcome: functional decline, dependence, institutionalization and mortality. With its intricate presentation and multifaceted origins, delirium is often worsened by insufficient recognition and improper treatment. Given their prime position for assessing patients prone to delirium, nursing holds a pivotal responsibility in both preventing and managing it.

Aim: To evaluate the influence of a one-day workshop on nurses' knowledge and confidence in caring for in-patient delirium among older adults.

Methodology: The intervention was a one-day delirium workshop, delivered in 29th February 2024, to 142 nurses from multi-disciplinary in Grand Swiss-Bell Hotel, Malacca. The workshop consists of short lectures and practical sessions. Participants completed a 25-item multiple choice knowledge questionnaire (MCKQ) and a self-evaluation survey, before and after the workshop. Data were analyzed using descriptive statistics.

Results: A total of 142 nurses participated in the workshop, with the majority originating from the medical department (37%), followed by those from health clinics (32.9%), and the remaining from surgical disciplines (30.1%). 70% of the nurses had over 10 years of service. Prior to the workshop, 66.2% of the nurses were unaware that non-pharmacological approaches are the primary management for in-patient delirium. There was a 36% improvement in total scores before and after the workshop. Before the workshop, 47.9% of the nurses expressed a lack of confidence in identifying delirium, whereas after the workshop, 83.8% reported a good understanding of delirium identification.

Conclusion: The majority of nurses exhibit improved understanding and confidence in identifying and caring for older in-patients with delirium. Consistent and ongoing educational initiatives are vital for sustaining nurses' and allied health team's knowledge and confidence in delirium management. Initiating further research on delirium education for healthcare professionals in Malaysia is warranted.

Abstract Id: CP_32

Gretel Wong[1], Ning Qi Pang[2], Jerrald Lau[1], Alyssa Ng[1], Cherie Hui Peh[1], Wei Ling Koh[1], Su Wei Wan[1], Ker-Kan Tan[1][2]
[1]National University of Singapore, [2]National University Hospital

Title: Health-related quality of life after colorectal cancer surgery in older patients compared to the young: A prospective multicentre observational study

Background: The impact of colorectal surgery on older adults' (≥65 years) health-related quality of life (HRQoL) is rarely reported.

Aim: This study investigates factors affecting colorectal cancer (CRC) patients' HRQoL following surgery.

Methodology: This is a prospective multi-institutional cohort study involving five hospitals in Singapore, recruiting newly diagnosed CRC patients who underwent colorectal surgery. Demographics, clinical and peri-operative characteristics of participants were collected. Participants completed the EORTC QLQ-C30 and Hospital Anxiety and Depression Scale (HADS) questionnaires at pre-op (baseline), pre-discharge, 1-month, 3-month, and 6-month from surgery.

Results: A total of 217 participants were recruited, of which 71 (mean 55.7±6.7) were <65 years old and 146 (mean 74.6±7.1) were ≥65. The trend of the global QoL and individual subscales show an overall dip in QoL from baseline to pre-discharge, before slowly rising until the 6-month mark. The HADS scores show an uptick in anxiety and depression at the point of pre-discharge compared to baseline, before trending downwards. The linear mixed model analysis shows that baseline score of the outcome measure was the only constant predictor of the outcome measure over time. Age≥65 was not a statistically significant predictor of the outcome measure in any analysis.

Conclusion: Age was not found to be a significant predictor of HRQoL in older adults undergoing colorectal surgery. Baseline scores of individual outcome measures consistently predicted post-operative HRQoL scores. Interventions should be targeted at specific subgroups of older adults scheduled for colorectal surgery, such as those with lower baseline scores.

Abstract Id: CP_39

Jing Yan Chan[1], Kean Yew Liew[1]
[1]Ministry of Health

Title: Unveiling the Veil: Case of Myxedema Coma Mimicking Dementia

Background: The gradual decline in cognitive and functional abilities is often seen as a natural part of aging in our culture. Many fail to seek treatment in the early stage, which results in delayed diagnosis of reversible causes of cognitive impairment, leading to significant morbidity and mortality. Hypothyroidism is an example of such a condition, particularly challenging to diagnose in older adults due to their tendency to exhibit non-specific symptoms and neurocognitive issues.

Aim: 1. To increase awareness on the atypical presentation of hypothyroidism in the elderly 2. To highlight the importance of screening for thyroid disorder in elderly who presents with symptoms and signs suggestive of dementia.

Methodology: This is a retrospective review of clinical case using the electronic medical records system in Hospital Ampang.

Results: 77 years-old-man with diabetes, hypertension, and tracheostomy as part of treatment of laryngeal cancer in the past; presented to the Emergency Department with reduced consciousness - Glasgow Coma Scale (GCS) of 8 (E3VTM5), fever and increased secretions. He was diagnosed and treated for Smear Positive Pulmonary Tuberculosis and Klebsiella Pneumoniae Bacteraemia based on cultures. Further history from his family revealed significant cognitive and functional decline over the past 2 months, from capable to perform activities of daily living without assistance to being completely bed bound, which raised the suspicion of underlying dementia. His children also noticed a decline in conscious level and responsiveness over the past one week. Despite initial improvement after treating the infections, he developed bradycardia, hypotension, hypoglycaemia, hyponatremia with further decline in GCS to E2VTM4. His thyroid function test confirmed the diagnosis of myxedema coma with TSH (Thyroid Stimulating Hormone) > 50mIU/L and T4 (thyroxine) <3.2pmol/L. He was initiated on thyroxine replacement and hydrocortisone with correction of his hyponatremia and glycaemic control. He showed remarkable improvement subsequently; with his GCS improving to E4VTM6. Upon discharge, he is able to obey commands and he communicates using sign languages.

Conclusion: In cases where an elderly individual exhibits symptoms and signs resembling dementia, hypothyroidism should be considered. With a high index of suspicion, it can be easily detected and effectively managed.

Abstract Id: SP_40

Nur Amylia Batrisya Rusdi[1], Parwathi Alagirisamy[1], Nordiana Nordin[1]
[1]Kpj Damansara Specialist Hospital

Title: Feasibility and Preliminary Evaluation of Cognitive Stimulation Therapy (CST) in Elderly Patients with Mild to Moderate Dementia in KPJ Damansara Specialist Hospital

Background: Dementia is a gradual degenerative illness that impairs cognitive function and places a heavy financial, psychological, and physical strain on individuals with the condition, those who care for them, and society at large. According to projections, the number of older persons in Malaysia who are 60 years of age and older is expected to rise in tandem with the prevalence of dementia. The geriatrician and clinicians at KPJ Damansara Specialist Hospital (KPJ DSH) are seeing an increase in patients with dementia due to the aging population and rising life expectancy. The present paradigm for caring for patients with dementia prioritizes medication intervention over the patient's psychological and functional requirements. As per the present guidelines, non-pharmacological interventions should be started in order to improve the long-term care and quality of life for dementia patients.

Aim: To assess the feasibility and preliminary Effects of CST for patients living with dementia in KPJ Damansara Hospital

Methodology: 20 participants were recruited in a 7-week group CST. The clinical effectiveness was assessed by cognitive functions (Mini Mental State Examination-MMSE), Communication (Holden communication scale-HCS) and Quality of life (Quality of Life in Alzheimer's Disease –QOL-AD).

Results: The mean age was 79 with 60% females and 75% were Malays. The is an increase by one log in MMSE, although not significant. Wilcoxon Signed Rank Test revealed statistically significant improvement in QOL-AD self-report version($p<0.016$), proxy version ($p<0.015$), (and communication ($p<0.001$). There was a significant improvement across all communication subcategories: conversation ($p<0.001$), awareness ($p< 0.001$) and communication($p<0.001$).

Conclusion: CST appeared to benefit persons living with dementia. This provides evidence to support the use of CST as a routine program to complement those with mild to moderate dementia on pharmacological treatment.

Abstract Id: CP_41

Abirami Gouri Pagan[1], Hwei Wern Tay[1], Kejal Hasmukharay[1]
[1]University Malaya Medical Centre

Title: Unmasking the Masquerade: A case of Recurrent Urinary Tract Infection Revealing an Unexpected Rectovaginal Fistula

Background: Urinary tract infection (UTI) is a common medical problem in the elderly population. The spectrum of disease varies from a relatively benign cystitis to potentially life-threatening pyelonephritis. The prevalence of UTI diagnosis in older persons has become so commonplace that often, the underlying causes for recurrent UTIs in this demographic are overlooked or inadequately investigated. Many are misdiagnosed as UTI which can inadvertently divert attention from potential true underlying occult infections.

Aim: This case report aims to highlight the challenges in diagnosing and treating UTIs in the elderly population, emphasizing the importance of thorough investigation to identify potential risk factors contributing to UTIs.

Methodology: A retrospective case report of a patient in a tertiary centre in Kuala Lumpur.

Results: A 78-year-old lady, a colon cancer survivor of more than 15 years with a history of recurrent UTIs, had multiple previous hospitalizations to different medical units due to UTI causing hypoglycaemia. She presented to our geriatric unit again due to fever with hypoglycaemia, without typical UTI symptoms. She was treated for UTI based on urinalysis result. A perineal examination was done to look for any structural abnormalities and revealed faecal material in the vagina. Contrast enhanced computer tomography (CECT) of the thorax, abdomen and pelvis showed presence of recto-vaginal fistula (RVF). Patient was subsequently referred to the surgeon for further management.

Conclusion: Older persons with atypical presentations are often misdiagnosed as UTI purely based on urinalysis. Even those with recurrent UTIs may not be adequately investigated to mitigate their risks for recurrent infection. Failure to do so, will lead to a vicious cycle of recurrent infections, with multiple courses of antibiotics, which might eventually lead to emergence of drug-resistant bugs and even superbugs. Once patients develop resistant strains, they may potentially spread to other patients that do not use antibiotics, which will eventually further escalate the issue of antimicrobial resistance, which is already a pressing public health problem.

Abstract Id: CP_42

Haniyyah Haniyyah[1], Nina Kemala Sari[1], Siti Annisa Nuhonni[1]
[1]Indonesia Univeristy

Title: Application of Palliative Care in Elderly Patient with Adenocarcinoma Gaster

Background: Gastric cancer in men are higher in elderly Asian patients and remain associated with a poor prognosis.(1) (2) Older adults with cancer often suffer from multiple comorbidities, cognitive impairment, and frailty, posing unique challenges in the delivery of palliative care.(3) Palliative care is an approach that improves the quality of life of patients and their families who are facing challenges associated with life – threatening illness.(4)

Aim: -

Methodology: -

Results: A 80-year-old diabetic and hypertensive man who was undergoing gastroduodenoendoscopy admitted to our hospital with hematemesis. Nausea vomiting had been complained for 2 months with a progressive weight loss (15 kgs in 2 months). There were also fever and cough. On examination, crakles on lungs was heard and hard mass of 8 cm in epigastrium was palpable. Contras abdominal Ct scan was done with irregular focal mass involving mucosa and muscularis pylorus antrum gaster wall. Biopsy revealed adenocarcinoma poorly differentiated dd/ non-Hodgkin lymphoma. From the comprehensive geriatric assessment, we found severe dependency, high probability of depression, frailty, predictive sarcopenia, and malnourished. The diagnose was adenocarcionoma gaster and community acquired pneumonia (CAP). We did first family meeting related to this finding and we discussed about the patient's preference, main problems, and the goal of therapy, finally agreed with palliative therapy. We consulted this patient to digestive division to provide nutrition access and scheduled a distal gastrectomy and gastrojejunostomy roux en y after CAP was resolved. This procedure was postponed because type 2 myocardial infarction attack in night before the procedure scheduled. This condition worsened by hospitalized acquired pneumonia (HAP). All the division that involved (13 divisions) in treating this patient held a meeting about the next treatment option. In this case, after careful geriatrician and all the divisions evaluation, the patient was not considered to be a good candidate for advanced treatment. The result of this meeting was delivered to the family, with collaboration between the geriatrician and palliative team. After this meeting, patient and family prepared all the worst consequences, include funerals and inheritance.

Conclusion: This case illustrates the complexity of delivering palliative care to geriatric oncology patient until successful dying.

Abstract Id: CP_44

Irma Permata Sari[1], Edy Rizal Wahyudi[1]
[1]University of Indonesia

Title: Management Approach of Delirium Superimposed on Dementia with BPSD in Very Elderly Woman

Background: Delirium superimposed on dementia (DSD) occurs when a delirium occurs concurrently with a pre-existing dementia. Indeed, especially in the advance stages of dementia, DSD diagnosis is challenging since a clear distinction between symptoms attributable to delirium and to dementia is difficult. The multiprofessional approach is key to provide the best care to patients with DSD.

Aim: -

Methodology: -

Results: A 91-year-old woman was admitted to the hospital with decreased of consciousness since 1 day ago. There was history of fever 2 days earlier accompanied by cough and flu. Before her current illnes, she could still walk when carried, still responded when spoken to even though she often cried suddenly, could still eat with assistance. She lives with her daughter, and a caregiver who always helps her in performing daily activities. She has a history of mixed type dementia (Alzheimer's and Vascular) which is accompanied by BPSD (hallucinations, nighttime behavior, irritability, changes in appetite, depression) since 2021, hypertension, CSVD, and history of dextra femur intertrochanter fracture. History of taking medications: Aripiprazole, Cilostazol, Donopezil, Amlodipine, Atorvastatin, Folic Acid. She was hypoactive delirium, mild tachypnea, mild tachycardia, and fever. The pulmonary examination revealed wet ronchi at the basal of both lungs, with no wheezing. Physical examination of other organs and neurological were normal. From CGA assessment, there was severe cognitive impairment, malnutrition, total dependence, frailty, predictive sarcopenia, high decubitus risk, high fall risk. Laboratory results showed elevated infection markers and blood glucose. Chest X-Ray showed pneumonia. The head CT scan showed lacunar infarction, cerebral atrophy, no bleeding or SOL. In the geriatric acute care ward, the patient was treated by multidisciplinary team include Geriatrician, Neurologist, Psychogeriatrician, Medical Rehabilitation, and Nutritionist. After 8 days of treatment, the patient's condition and infection markers gradually improved. According to the caregiver, the patient's consciousness was like before the patient entered the hospital.

Conclusion: We have reported a case of very elderly woman with DSD and BPSD, where the precipitating factor for delirium was pulmonary infection, aggravated by multiple comorbidities. With multidisciplinary management, the diagnosis of DSD was established and the patient's condition improved during treatment.

Abstract Id: CP_45

Wan Feng Ong[1], Nareshraja Janardanan[2], Hwei Wern Tay[3], Ho Yi Bin[1], Rizah Mazzuin Razali[4]
[1]Hospital Selayang, [2]University of Malaya Medical Centre, [3]Hospital Tengku Ampuan Rahimah, [4]Hospital Kuala Lumpur

Title: Exploring Dementia Awareness in Community Initiatives: A Knowledge Assessment Study

Background: The prevalence of dementia among individuals aged 60 and above in Malaysia stands at 8.5%, and is expected to increase as Malaysia becomes an aged nation by 2030. However, there is lack of assessment regarding the local community's understanding of dementia.

Aim: To assess public basic knowledge of dementia during two community health screening projects.

Methodology: This cross-sectional study evaluated participants from two community health screening projects conducted at a local park, and the main lobby of a prominent general hospital during the final quarter of 2023. We employed a validated questionnaire developed by M.F. Ali et al. (2023), which was originally derived from the Northern Ireland Life and Times (NILT) Survey 2010. It consists of seven true or false statements about dementia, with Malay translations adapted for our local context. A scoring system ranging from 0 to 4, or wrong answer for the critical statement "Dementia is a part of the normal process of aging", indicating low awareness, 5 denoting medium awareness, and ≥ 6 indicating high awareness, was applied. Mini-Cog test was used to screen for cognitive impairment (score of <3).

Results: Majority of the 196 participants were female (65.3%), Malay (57.7%), with a median age of 65 (interquartile range [IQR] 8) years, while almost 1 in 5 may have cognitive impairment. A striking 91.5% of participants demonstrated a low level of awareness regarding dementia, with a median awareness score of 4 (IQR 1). The statement "Dementia is a part of the normal process of aging" was incorrectly answered most (80.9%), followed by "Dementia is another term for Alzheimer's disease" (62.6%), "Dementia can be cured" (57.8%), and "Dementia is a mental illness" (55.1%). Conversely, majority know that healthy diet and exercise reduces risk of developing dementia (81.1%), dementia is a disease of the brain (78%) and there are many dementia types (72%). No significant associations were found between the level of dementia awareness, with age, gender, race, or cognitive impairment.

Conclusion: Our evaluation shows 91.5% of participants had poor knowledge of dementia, with 81% incorrectly believing it's normal part of aging. These figures are significantly higher than those from a 2012 survey in Northern Ireland, where only 49% had low awareness and 28% had misconception about dementia and aging. This highlights the need for better education and promotional efforts to improve dementia knowledge in the community.

Abstract Id: CP_47

Ong Wan Feng[1], Nida Ul-Huda Adznan[1], Nurul Huda Mohd Zambri[1], Tunku Muzafar Shah Tunku Jaafar Laksmana[1]
[1]Hospital Selayang

Title: Towards Tailored Care: Evaluating Heart Failure Clinic Practices in the Older Persons

Background: Heart failure in older persons is often associated with the presence of multiple comorbidities, atypical symptoms, polypharmacy, and age-related pharmacokinetic and pharmacodynamic alterations. This poses a challenge in tailoring optimal therapeutic regimens while minimizing adverse effects and drug interactions.

Aim: To compare differences in characteristics and outcomes of older persons with heart failure in comparison with younger patients attending the outpatient heart failure clinic.

Methodology: This was a retrospective cross-sectional study conducted on 138 heart failure patients attending a heart failure clinic at a non-cardiac tertiary centre located in a busy urban district, from February 2023 to February 2024.

Results: 44.9% of the 138 heart failure clinic patients were aged 60 years and above. Majority were Malay (46.8%), male gender (69.4%) and low-income earners ≤ RM2500/month (85.5%). 83.9% of the older heart failure patients have reduced left ventricular ejection fraction (<40%) and predominantly ischemic driven (75.8%). Co-existing vascular risk factors include hypertension (67.7%), type 2 diabetes melitus (58.1%), obesity with BMI ≥27.5 kg/m² (30.6%) and smoking history (37.1%). 22.6% older heart failure patients were successfully initiated on all four pillars of guideline-directed medical therapy (GDMT).
Half were of New York Heart Association (NYHA) Class II (53.2%). All showed improvement in NYHA class following attendance at our heart failure clinic within the same year (p-value <0.001). The median number of admissions per year following heart failure clinic attendance was zero and 4.8% of older patients under follow up died during the same year.
More of the older patients suffer from atrial fibrillation (29%, p-value <0.001), have ≥ 3 co-morbidities (61.3%, p-value 0.48), less obese (30.6%, p-value <0.001) with median BMI 27.7 kg/m² (Interquartile range [IQR] 6.7) and less initiated on angiotensin receptor-neprilysin inhibitor (ARNi), (45.2%, p-value <0.05). No significant differences were found in terms of basic demographics, NYHA class, heart failure classification, GDMT initiated, and outcomes.

Conclusion: Our study shows older patients attending heart failure clinic have more multi-morbidity and atrial fibrillation. Nonetheless, they demonstrate comparable outcomes to the younger heart failure patients. This demonstrates specialized heart failure clinics are effective and safe for the older persons.

3

Rezdy Tofan Bhaskara[1], Arieza Tri Jitnopermata[2], Sri Soenarti, Tita Hariyanti[3]
[1]Brawijaya University General Hospital, [2]Wisnuwardhana University, [3]Saiful Anwar General Hospital

Title: Family, Friends, Hospital Supports and Psychological Conditions of Geriatric Patients in Malang, Indonesia

Background: The need for support in the context of elderly health care is one of the fundamental aspects that influence the healing process and the patient's quality of life.

Aim: To support the elderly in care, it includes not only medical aspects but also comprehensive emotional, psychological, social and hospital supports.

Methodology: The authors used a qualitative approach that described and documented in writing about elderly patients in the Inpatient Room at Saiful Anwar General Hospital, Malang. Participants as research samples were selected using a purposive sampling method based on suitability and adequacy principles according to the inclusion criteria set by the authors. This study involved 5 participants at Saiful Anwar General Hospital, Malang.

Results: Social or family support given to the patients while undergoing treatment can become a coping resource and protective component in accelerating recovery. Elderly patients need support from those around them, i.e., family, friends, and the hospital environment. Based on findings, patients may have kind and patient partners, patients can be comforted upon hearing news from their children, patients receive attention from friends who are ready to help and encouragement to recover, effective and efficient hospital service support, and universal health coverage services. These can help patients feel comfortable. Family support is more broadly interpreted as support given to the elderly by family, relatives, and friends. The support given to the patients can take the form of attitudes, actions, and acknowledgments from their families to help them in sickness and stress.

Conclusion: Through this study, an understanding of support in various forms can help elderly patients face life's challenges and is expected to improve patient resilience, speed up healing processes, and increase their quality of life.

Jia En Chew[1], Xiu Xin Teng[1], Jun Ni Keng[1], Alan Swee Hock Ch'ng[1], Stephenie Ann Albart[1]
[1]Hospital Seberang Jaya, Penang

Title: Clinical Characteristics and Prevalence of Delirium in Hospitalised Older Patients: A Prospective Cross-Sectional Study

Background: Delirium is a common and underdiagnosed neuropsychiatric condition in hospitalised older patients. Managing older patients in acute medical wards is challenging as they often present with complex health issues and are vulnerable to iatrogenicities and functional decline following hospitalisation.

Aim: This study was aimed to elucidate the clinical profile and prevalence of delirium in hospitalised older patients in acute medical wards.

Methodology: A cross-sectional prospective study was performed on patients aged 65 years and above who were admitted to acute medical wards from 1st January to 31st March 2018. Subjects were recruited by convenience sampling within 48 hours of admission. All patients were screened for delirium using the Short Confusion Assessment Method (CAM-S) and confirmed by Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) criteria. Basic characteristics, comorbidities and risk factors of delirium were studied.

Results: A total of 131 subjects were recruited. The study population had a mean age of 73 years (SD 6.5 years) with equal proportion of males and females. The majority were Malays (38.9%), followed by Chinese (35.1%) and Indians (26.0%). The top five comorbidities were hypertension (75.6%), diabetes mellitus (58.8%), ischemic heart disease (24.4%), chronic kidney disease (19.8%) and stroke or transient ischemic attack (16.0%). Notably 102 (77.9%) out of 131 subjects had multimorbidity which was defined as the presence of two or more chronic medical conditions. The prevalence of delirium within 48 hours of hospitalisation was 9.2%. About one third (37.4%) of patients were frail and one fifth (20.6%) of patients had a history of fall prior to the admission. 14.5% of patients had visual impairment and 13.7% had hearing impairment. Polypharmacy was common as more than half (51.1%) of the subjects were prescribed five or more medications on a regular basis. Assessment of various risk factors of delirium revealed that 1 in 3 patients had an indwelling urinary catheter.

Conclusion: Delirium is prevalent in hospitalised older patients. Multimorbidity, polypharmacy and frailty are common among older patients in acute medical wards. Early identification and prompt management will reduce the complications of hospitalization.

Abstract Id: CP_52

Mohamad Azhari Ruslan[1], Mohamad Zahir Mohd Zulkifli[1], Baharudin Muhammad 'Ammar[1], Abd Razak Nur 'Ayunni[1]
[1]Sultan Ahmad Shah Medical Centre@Iium

Title: EXPLORING TARDIVE DYSKINESIA: GERIATRIC POLYPHARMACY UNRAVELED

Background: Polypharmacy is a common issue among older adults that can lead to significant negative outcomes in the form of unnecessary disability and harm. We present a case in which a patient developed tardive dyskinesia affecting her quality of life as a result of intravenous metoclopramide

Aim: Ensuring safe drug prescriptions among geriatric patients represents a frontier of excellent clinical practice

Methodology: Case description
A 65-year-old woman with type 2 diabetes mellitus, hypertension and end-stage renal failure on haemodialysis via a right intra-jugular venous catheter presented with intra-dialytic chills and rigor associated with fever. There was no history of nausea or vomiting. She was treated for catheter-related bloodstream infection and commenced on intravenous cefazolin 1 gram once daily, intravenous ceftazidime 1 gram once daily and intravenous metoclopramide 10 mg once daily alongside her regular medications.
On the second day of admission, she developed acute and progressively worsening tardive dyskinesia which affected her basic activities of daily living as reflected by a reduction in her Modified Barthel Index (MBI) score from 98/100 to 41/100.

Results: Upon discontinuation of intravenous metoclopramide and the commencement of a 3-day course of oral clonazepam 1mg once daily, her symptoms resolved and her MBI improved to 56/100 following a period of rehab.

Conclusion: This case highlights the consequences of polypharmacy in older adults, particularly when medications are used unnecessarily. The practice of safe prescribing is paramount in older persons involving drugs that are included in the Beers Criteria. Multidisciplinary team involvement is crucial in improving the function of frail older adults.

Abstract Id: SP_54

Malarkodi Suppamutharwyam[1], Elizabeth Chong Gar Mit[1]
[1]Hospital Kuala Lumpur

Title: Beyond a Stumble: Demographics, Clinical Features, and the Osteoporosis Link

Background: Osteoporosis, a major threat to aging populations, increases fracture risk and healthcare burden.

Aim: This study aimed to identify the demographic characteristics, clinical features, and modifiable risk factors associated with osteoporosis.

Methodology: We retrospectively reviewed medical records of 144 patients attending the outpatient falls clinic at Hospital Kuala Lumpur in 2023.

Results: Mirroring global trends, our analysis revealed a predominance of elderly Chinese females with osteoporosis (71%, 82%, and 82% for Chinese ethnicity, female sex, and age 70+, respectively). Patients diagnosed with osteoporosis experienced a higher frequency of recurrent falls, particularly due to balance issues (OR 1.29), joint pain (OR 1.15), slipping (OR 1.93), or unknown causes (OR 1.61).
These patients also suffered significantly higher rates of major injuries (36%, p=0.035, OR 2.28) and fractures (40%, p=0.025, OR 2.31), with hip fractures being most common (49%, p<0.001). Patients with osteoporosis had significantly higher incidences of previous fractures (44% vs 19% in non-osteoporosis group, p-value 0.002, OR 3.26).
Risk factors contributing to falls and osteoporosis included poor vision (83%, OR 1.54) and cognitive impairment (60%, p<0.001, OR 3.58). Both groups reported fear of falling (~25%), but the osteoporosis cohort had a higher burden of co-morbidities namely osteoarthritis (32%, OR 1.14), hypertension (72%, OR 1.13), arrhythmia (7%, OR 1.55), incontinence (21%, OR 1.77) and dementia (15%, OR 1.95). Out of 144 patients seen at the fall's clinic, 83% (119) received a bone mineral density scan (BMD).
Osteoporosis patients received fewer antihypertensive medications namely angiotensin-converting enzyme inhibitors (p-value 0.012), loop diuretics (p-value 0.002), thiazide diuretics (p-value 0.019) and alpha blockers (p-value 0.03) after visiting the falls clinic, suggesting appropriate deprescribing practices.
Vitamin D supplementation significantly increased after falls clinic visits (30% to 60%, OR 1.58). Anti-osteoporosis medication uses also rose dramatically (54% to 93%, p<0.001, OR 58.7), with bisphosphonates being the most prescribed (90%).

Conclusion: This study underscores the importance of a two-pronged approach to prevent falls and fractures: addressing modifiable risk factors and focusing on bone health to prevent fragility fractures. Future research could investigate medication adherence, falls reduction post-clinic intervention, and quality of life improvement in this population.

Abstract Id: CP_57

Hui Sian Tay[1]
[1]Pantai Hospital Ayer Keroh

Title: Efficacy of Combination of Hyaluronic Acid, Undenatured Type II Collagen, and Boswellia Serrata Gum Extract Capsule in Treating Osteoarthritis

Background: Articular cartilage's elastic nature slows down the vibration and impact of the joints when the limbs move. Type II Collagen constitutes the primary structural component of cartilage. There is synovial fluid, mainly containing Hyaluronic Acid (HA) between the cartilage.
In osteoarthritis (OA), there is a notable decrease in the concentration of HA, ongoing inflammation, and the progressive deterioration of protective cartilage. This results in pain, stiffness, and reduced joint mobility.

Aim: The combination of Hyaluronic Acid, Undenatured Type II Collagen, and Boswellia Serrata Gum Extract capsule helps to achieve the goals of OA treatment such as reducing pain and inflammation, improving joint function, and preventing disease progression.

Methodology: 2 cases have been selected to demonstrate the effectiveness of this combination capsule after the patients tried other conservative treatments such as pain relievers and other supplements for OA with limited success.

Results: 80-year-old man with six months history of severe left hip pain causing him to be chairbound and needing Oxycodone. After four months on the combination capsule, his pain eased, allowing him to walk and even ride a motorbike. His depression, anorexia, and insomnia also improved alongside his osteoarthritis. The second case involved a 73-year-old man with severe knee pain, despite receiving five intra-articular HA injections in three months. After three months on the combination capsule, he experienced significant improvement, and was able to kneel for prayer without difficulty.

Conclusion: The combination of hyaluronic acid, undenatured type II collagen and Boswellia Serrata capsule reduces pain, improves joint function and mobility, and quality of life of patients suffering from osteoarthritis.

Abstract Id: CP_58

Hui Sian Tay[1]
[1]Pantai Hospital Ayer Keroh

Title: Efficacy of 1% Testosterone Gel in Treating Hypogonadism

Background: Testosterone is the primary male hormone responsible for developing male sexual characteristics, maintaining muscle and bone health, and regulating libido and mood. Hypogonadism occurs when testosterone levels fall below the normal range, leading to issues such as reduced sexual desire, infertility, decreased muscle mass, and bone density loss, significantly affecting a man's health and quality of life.

Aim: Testosterone Replacement Therapy (TRT) is a treatment designed to counter these effects by restoring testosterone levels to normal. It works by supplementing the body's natural testosterone, aiming to alleviate the symptoms associated with low testosterone, thereby improving the patient's overall well-being, and addressing the complications arising from hypogonadism.
1% testosterone gel provides a steady testosterone level with minimal risk of fluctuations in testosterone levels.

Methodology: A case has been selected to demonstrate the effectiveness of 1% testosterone gel.

Results: A 63-year-old man with past medical history of ischaemic heart disease, congestive cardiac failure, hypertension, diabetes, obesity, and osteoarthritis presented with symptoms including anorexia, malaise, weakness, tiredness, low mood, insomnia, and reduced mobility. His testosterone level was 1.2 nmol/L (normal range is 8.0 - 31.3). He began treatment with 2 sachets of 1% testosterone gel per day. After three months of TRT, his testosterone level rose and maintained at 15.5 nmol/L, and he experienced significant improvement in mood, sleep, appetite, mobility, and energy. His libido and erectile dysfunction also improved following TRT.

Conclusion: 1% testosterone gel improves male hypogonadism symptoms and quality of life.

Abstract Id: CP_59

Zahira Zohari[1], Nurulakmal Obet[2], Dato' Tunku Muzafar Shah Tunku Jaafar[1]
[1]Hospital Sultan Abdul Aziz Shah, UPM, [2]Hospital Selayang

Title: A Case of Orofacial Dyskinesia in a Patient with Dementia: A Challenging Clinical Presentation

Background: Behavioural disturbances and psychiatric symptoms (BPSD) are prevalent in up to 90% of individuals with dementia. Managing BPSD is often initiated with non-pharmacological strategies, supplemented by psychotropic medications when necessary. However, these medications frequently lead to adverse reactions, including extrapyramidal symptoms (EPS), which significantly impact the patient's quality of life.

Aim: This case discusses the efficacy and safety of psychotropic and antipsychotic medications in managing Behavioral and Psychiatric Symptoms of Dementia (BPSD) while minimizing the risk of extrapyramidal symptoms.

Methodology: This is a case of a man in his late 70s with a clinical diagnosis of vascular dementia. He presented with severe BPSD, characterised by agitation and visual hallucinations. The treatment strategies utilised a range of psychotropic and antipsychotic medications. While these treatments initially mitigated some behavioural symptoms, they subsequently led to the development of orofacial dyskinesia. The development and recurrence of tardive dyskinesia in this patient were explored, considering the delayed effects of typical antipsychotics, the potentiating effects of an atypical antipsychotic, and interactions with SSRIs and acetylcholinesterase inhibitors. Multiple adjustments in his treatment regimen were made aimed at minimising adverse effects while effectively managing the BPSD.

Results: This case highlights the challenges of managing BPSD, which involves balancing the therapeutic benefits of antipsychotics and SSRIs against the risks of EPS. This condition is rarely attributable to a solitary, isolated factor. Early recognition and proactive management of EPS are emphasised to enhance treatment adherence. This case also highlights the critical need for regular monitoring, careful medication adjustment, and a focus on overall well-being to optimise outcomes and maintain the patient's quality of life.

Conclusion: A delicate balance between managing symptoms and mitigating side effects is required, especially in older patients with complex health profiles. Ultimately, this report contributes to the growing body of knowledge necessary for improving the quality of life for dementia patients and their caregivers through more informed and sensitive therapeutic interventions.

Abstract Id: CP_62
3
Salmi Fatirah Salim[1], Mohd Zulkifli Mohamad Zahir[1], Wan Muhammad Hisham Wan Mohamad[1], Nur Amalina Mohd Yahya[1]
[1]Sultan Ahmad Shah Medical Centre @IIUM

Title: Rubber Band Bezoar induced Small Bowel Obstruction:A Case Report

Background: Bezoar, a rare cause of small bowel obstruction in older individuals1,2, often presents a diagnostic challenge in geriatric patients1. Here, we present a case of an older person who presented with recurrent abdominal pain and distension due to a small bowel obstruction caused by a rubber band bezoar.

Aim: Case report

Methodology: A 77-year-old gentleman with underlying mild cognitive impairment and left transitional renal cell carcinoma underwent a left nephroureterectomy and was discharged well postoperatively. He presented 1-week post-discharge with vomiting, constipation and abdominal distension. He was admitted for 2 weeks for small bowel obstruction secondary to jejunal loop adhesion and was treated conservatively. Two days after being discharged, he was readmitted for hospital-acquired infection and was started on intravenous piperacillin-tazobactam 4.5g QID. After 10 days in the ward, he developed hyperactive delirium with worsening abdominal distension. Serial abdominal X-rays showed a dilated small bowel. A CT abdomen showed a phytobezoar within distal jejunal loop resulting in proximal small bowel dilatation. His symptoms worsened despite intravenous fluid replacement, nasogastric decompression and a 7-day course of intravenous meropenem 1g TDS for worsening sepsis. Repeated CT abdomen showed phytobezoar within the proximal ileal loop with perforation sites at the proximal jejunal loops. He then underwent exploratory laparotomy with segmental small bowel resection and double barrel stoma. Intraoperative findings were purulent peritoneal fluid with slough and a rubber band bezoar 180cm from duodenojejunal flexure. After a period of rehabilitation, he was discharged with a Modified Barthel Index (MBI) score of 52/100 indicating a moderate level of dependency despite a stormy and prolonged hospital admission.

Results: This case illustrates the complexity of managing an acutely unwell geriatric patient where clinical presentations may be subtle and varied. The importance of prompt investigation and involvement of a multidisciplinary team in achieving an accurate diagnosis is highlighted.

Conclusion: Despite the complexity, a well-coordinated care plan of management between all healthcare professionals will improve the outcome and mitigate the risk of this uncommon diagnosis. It emphasizes the positive impact of a holistic approach in treating geriatric populations.

Abstract Id: CP_63

Katarina Shin Yee Choo[1], Katarina Shin Yee Choo[1], Gordon Pang[1]
[1]Hospital Queen Elizabeth

Title: Benchmarking standards of hip fracture care in Hospital Queen Elizabeth

Background: Fragility hip fractures represent a significant healthcare burden globally in an ageing population, necessitating effective management strategies to optimize patient outcomes and resource utilization. Orthogeriatric service focuses on acute hip fracture care of older adults were initiated in Feb 2022 with the aim to improve hip fracture care.

Aim: To analyse important key performance indicators in our orthogeriatric service in HQE, in comparison to international best practice standards.

Methodology: A retrospective study with Clinical data on fragility hip fracture patients aged >60 admitted to Hospital Queen Elizabeth from October 2023 to March 2024 were captured. Demographic information, time to surgery, length of stay, Bone health protection, Post operative delirium and time to mobilisation were analysed. Analysis was performed with reference to those from National Hip Fracture Database UK and our pilot study in 2022.

Results: The study revealed a wide range of length of stay for fragility hip fracture patients at HQE, spanning from 4 to 49 days with a mean of 13 days. Prompt surgical intervention within 48hours was achieved in 30% of cases, comparing to 7% in 2022. The incidence of postoperative delirium was observed to be 4%. Additionally, initiation of bone medication within the hospital stay was documented in 38% of patients. Postoperative mobilization within 24 hours of surgery was accomplished in 29% of cases, while fall assessments were conducted in 12% of patients.

Conclusion: These findings highlight both strengths and areas for improvement in fragility hip fracture management at HQE when compared to NHFD KPIs. Further strategies such as research and quality improvement initiatives, and formalisation of hip fracture pathway involving key stakeholders of the hospital are warranted to address these disparities and improve the quality and outcomes of hip fracture care in HQE.

Abstract Id: CP_68

Nor Hazwani Zenol Ariffin[1], EGM Chong[1]
[1]Hospital Kuala Lumpur

Title: Time Matters: Enhancing Recovery with Timely Osteoporosis Therapy

Background: Following fragility fracture, patients should receive active management of osteoporosis including commencement of antiosteoporosis medication.

Aim: We aim to examine the timing of commencing anti-osteoporosis agent following fragility fracture and exploring barriers in starting the medication in timely manner.

Methodology: Retrospective data for patients attending Falls clinic Hospital Kuala Lumpur from 2019 to 2023, following fragility fracture including hip, femur, wrist and vertebral fracture were collected through random sampling.

Results: Out of 64 samples collected, all patients were started on Calcium and Vitamin D supplement except 2 (3.1%) due to hypercalcemia. Calcium levels were measured for all the patients, however, there were no Vitamin D assessments performed due to issues relating to a lack of resources.
86% of the patients were started on antiosteoporosis agent following fragility fracture, with or without surgical intervention. Amongst those, 58% of patients started on average within 3 weeks of fracture or surgical intervention. Reasons for the delay more than 3 weeks include poor oral hygiene for dental clearance, anaemia with poor oral intake and loss of weight, and acute kidney injury.
2 cases (3.6%) were documented awaiting for BMD result prior to starting antiosteoporosis agent while 21% of the patients were delayed without any clear indication of the delay. This could imply either the doctor's oversight in omitting the prescription for the anti-osteoporotic agent or a lack of familiarity on the part of the treating doctor regarding the initiation of such agents for osteoporosis treatment. The 14% of patients from our study were not started on antiosteoporosis medication. Reasons include ESRF and CKD Stage 4-5.

Conclusion: While a majority of patients in our sample population were started on antiosteoporosis agent post-fracture, a significant proportion experienced delay in treatment initiation due to various factors. In conclusion this study underscores the need for healthcare providers to be vigilant in addressing timely anti-osteoporosis treatment initiation post-fracture, with the goal of improving outcomes and reducing future fracture risk.

Abstract Id: SO_70

Yee Ling Wong[1], Gordon Hwa Mang Pang[1]
[1]Hospital Queen Elizabeth

Title: Evaluating the clinical burden of hospitalized elderly in a public tertiary hospital

Background: Aging leads to rising healthcare costs, with a notable increase in healthcare burden observed among hospitalized elderly individuals. Delirium and hospital-associated deconditioning contribute to longer hospital stays, higher readmission rates, and increased mortality.

Aim: This study aims to assess the clinical burden of hospitalized elderly by evaluating delirium, deconditioning and readmission rate.

Methodology: A prospective study was conducted in four general medical wards in March 2024. All new admissions aged 65 and above were included. Those transferred out to district hospital or other specialty wards were excluded. Diagnosis of delirium is based on clinical symptoms with or without CAM score assessment. Readmission is defined as history of hospitalization past one year.

Results: A total of 99 cases were included in the analysis. The median age is 72 years, with approximately 60% being male. The median inpatient stay is 6 days.
The delirium rate is 18.2%, the readmission rate is 46.5%, and the mortality rate is 10.1%.
The rate of deconditioning across the 6 components of basic activities of daily living ranges from 13% to 30.1%.
Majority were mobile one month prior to admission, with 51.7% walking unaided and 33.7% ambulating with aid. Additionally, 10.1% were bedbound, and 4.5% were wheelchair-bound. The rate of deconditioning for mobility is 32.6%, among which 17.4% became wheelchair-bound, 4.3% became bedbound, and 10.9% now require walking aid.

Conclusion: The median inpatient stay of 6 days suggests a significant duration of hospitalization. Delirium rate of 18.2% indicates the importance of specialized care for this vulnerable group to prevent and manage delirium episodes effectively.
The high readmission rate of 46.5% and mortality rate of 10.1% underscore the need for comprehensive discharge planning and follow-up care to reduce the risk of readmissions and improve patient survival.
Deconditioning, reflected by a range of 13% to 30.1% across six components of basic ADL and 32.6% for mobility status with significant proportion of patients becoming wheelchair bound, is a significant concern in this population. To mitigate adverse outcomes, hospital protocols should prioritize comprehensive geriatric assessments, early mobilization strategies, and multidisciplinary care coordination.

Abstract Id: CP_71

Ho Yi Bin[1], Lee Ai Vuen[1], Reena Nadarajah[1], Nurul Huda Mohd Zambri[1], Tunku Muzafar Shah Tunku Jaafar Laksamana[1]
[1]Hospital Selayang

Title: Beyond the Break: Osteoporosis Management Following Hip Fractures

Background: Clinical guidelines recommend secondary prevention after an initial fragility fracture. However, real-world adherence to guidelines remains poor. All patients with a fragility hip fracture are admitted under Orthopaedics in our hospital. This period coincided with the introduction of an Orthogeriatric service in our facility. Therefore, some patients were followed up in the Geriatric clinic, in addition to the usual Orthopaedics follow-up.

Aim: This study aims to examine the prescription rate of calcium supplements, vitamin D, and osteoporosis treatments among patients discharged from the Orthopaedic ward following a fragility hip fracture and at 6 months.

Methodology: Patients with fragility hip fractures between January to August 2023 were retrospectively analysed using data obtained from clinical notes and the Pharmacy Information System (PHIS). Patients on either biphosphanate, Denosumab or Raloxifene were considered to be on osteoporosis treatment.

Results: 121 patients were admitted with a fragility hip fracture during this period. Upon discharge, 111 (91.7%) were prescribed calcium supplements and vitamin D; 74 (61.15%) were prescribed osteoporosis treatment. At 6 months, 55 (49.5%) remained on calcium and vitamin D; while 29 (39.2%) remained on osteoporosis treatment, and 45 (60.8%) were not. Of those not on treatment, 30 (66.7%) had defaulted follow-up, 12 (26.7%) did not have their prescription renewed during follow-up and 3 (6.7%) had been discharged to another facility. At 6 months, 68% of patients who were attending the Geriatric clinic remained on osteoporosis treatment, compared to 24.5% of those attending the Orthopaedic clinic only (p=0.000).
Age, gender, frailty, polypharmacy, type of fracture, and surgical intervention did not appear to affect osteoporosis treatment.
23.4% of patients not prescribed osteoporosis treatment at discharge were started on treatment during follow-up.

Conclusion: Our study showed there is much room for improvement in osteoporosis management post fragility hip fracture in our center. There was a significant decline in the prescription rate for calcium, vitamin D and osteoporosis treatment over a 6 months period following a hip fracture. Osteoporosis treatment prescription rates were better for patients followed up under Geriatric compared to those attending the Orthopaedic clinic only. We propose a formal Fracture Liaison Service to standardise management and improve outcomes.

Abstract Id: SP_72

Thirresh Guna Segaran[1], Hazlina Mahadzir[1], Nur Aina Mohd Asib[1]
[1]University Kebangsaan Malaysia

Title: Correlating between Basic Physical and Cognitive Function among Dementia Patients and Caregiver Burden

Background: Dementia is a prevalent and debilitating condition characterized by progressive cognitive decline and functional impairment, posing significant challenges for affected individuals and their caregivers. The caregiving experience is multifaceted, encompassing emotional, physical, and social aspects, with caregivers often experiencing high levels of stress, strain, and burden. Understanding the interplay between cognitive function, functional status, and caregiver burden addresses critical research gap and is essential for developing effective interventions and support strategies to enhance patient and caregiver well-being.

Aim: The aim of the study is to investigate the associations between Mini-Mental State Examination (MMSE) scores, Modified Barthel Index (mBI) scores, and Burden Scale for Family Caregivers (BSFC) among caregivers of individuals with dementia.

Methodology: A cross-sectional study design was employed, involving 40 participants from a community-dwelling caregivers of individuals with dementia attending the geriatric clinic from Hospital Canselor Tuanku Muhriz (HCTM).

Results: Data showed that there was a positive correlation between mBI scores (r= 0.175, p= 0.279) and a insignificant negative correlation with the total BSFC scores (r=-0.113, p= 0.487) for Mini-mental State Examination (MMSE). The findings of this study highlight the complex relationship between cognitive function, physical functional status, and caregiver burden in the context of dementia care. Higher levels of cognitive function and functional independence were associated with lower levels of subjective caregiver burden, underscoring the importance of maintaining cognitive and functional abilities for both care recipients (individuals with dementia) and caregivers.

Conclusion: In conclusion, this cross-sectional study provides valuable insights into the associations between basic physical function and cognitive function among individuals with dementia and caregiver burden among family members as their primary caregiver. Behavioral problems or psychological symptoms were the primary factor of individual with dementia that associated with caregiver burden. Caregiver socio-demographical factors and psychological factors were two primary factors of the caregiver burden. These challenges include communication challenges, financial difficulties, challenges related to medication management, and transportation challenges. The results emphasize the significance of thorough evaluation in comprehending the caregiving phenomenon, accentuating the necessity for interventions and support provisions to meet the varied requirements of caregivers and care recipients within dementia care contexts.

Abstract Id: SO_74

Thamayanthi Naidu Manoharan[1], Asmidawati Ashari[1], Siti Noraini Asmuri[1]
[1]University Putra Malaysia

Title: Adaptation, validation and reliability of Knowledge, Attitude and Practice (KAP) of healthcare practitioner's Questionnaire tool on falls prevention among Parkinson's Disease (PD)

Background: KAP Questionnaire can utilised as a measurement tool of knowledge, awareness, perception and practice of healthcare practitioners to assess efficiency of knowledge translation into practice for specific condition. Inpatient Parkinson's disease whom admitted at hospital had high risk of falls . Currently, no instrument has been explicitly crafted to assess the KAP of healthcare practitioners on falls prevention among Parkinson's patients at hospital setting. The purpose of this study was to adapt, validate and assess the reliability of the tools ,providing researcher with a effective assessment tool to study effective falls prevention for high risk patients such as Parkinson's patients.

Aim: was to adapt, validate and assess the reliability of the tools ,providing researcher with a effective assessment tool to study effective falls prevention for high risk patients such as Parkinson's patients.

Methodology: The KAP questionnaire adapted and modified from Sinuraya,(2016) for knowledge section and Attitude and Practice part from Han et al., 2020, which consist 12 questions every part, in total of 26 questions.The adapted questionnaire underwent content validation with 2 experts for English language. Then, the questionnaire translated in Malay language by a experienced translator and a proofreader. The translated Malay KAP questionnaire underwent back translation into English language by certified proof reader and bilingual translator. Then, board meeting was conducted to evaluate the translation , by researchers and translators. The Malay questionnaire underwent content validation by 2 experts. Then , the questionnaires in both language was tested by distribute the questionnaire to 21 private university medical students,their response was recorded for English verson, the Malay version was distributed after a week of interval . Only 3 students provided similar answers in both version. Then the bilingual questionnaire was pilot tested among 30 healthcare practitioners based from inclusion and exclusion criteria for those had experience working at hospital setting, accepted as a subjects except from Hospital Sultan Abdul Aziz Shah (HSAAS).

Results: Through pilot testing, the content validity for English and Malay version version (CVI-Index) was acceptable in term on relevance and clarity of the study. A test of reliability done using Richard -Kudarson reliability for knowledge section was 0.66, suggest moderate reliability. Then,Cronbach alpha reliability for attitude was 0.77 and 0.94 for practice, which in Likert scale.

Conclusion: The KAP questionnaire is a valid and reliable measurement tool for evaluating KAP of healthcare practitioners on falls prevention among Parkinson's Disease (PD) patients at hospital setting

Abstract Id: CP_76

Rosmaliah Alias[1], Mohd Shahezwan Abd Wahab[1], Shubashini Gnanasan[1], Rizah Mazzuin Razali[2], Hadijah Mohd Taib[2]
[1]Universiti Teknologi MARA (UITM), [2]Hospital Kuala Lumpur

Title: Evolving Landscape of Post-Discharge Care for Older People: A Bibliometric Analysis

Background: The post discharge journey is vital for older people (OPDJ). It spans from leaving the hospital to returning home or transitioning to another setting. OP often require ongoing care during this transition to ensure a successful recovery and prevent readmission.

Aim: This study aims to map the evolution research pattern of healthcare research, relevant areas and and potential research gaps.

Methodology: Search strategy using TITLE (elderly[MeSH Terms]) AND TITLE("post-discharge"[MeSH Terms]) retrieved 1,787 articles from the Scopus database published between 2014 and February 2024. Studies extracted journals, human study and english language results in 597 articles used for bibliometric analysis. Finally,through Publish and Perish, VOSviewer and Scopus Analyzer, this study descriptively categorizes and analyzes the data, focusing on scope, geographical distribution, and thematic evolution of published works.

Results: Results shows the total citations of 5,749 from 597 articles translates to an average of 9.63 citations per article. The trend of gradual increase in numbers of publications peaking in 2021 to 2022 and slight downturn during pandemic COVID-19. Field of Medicine dominates the literiture accounting 58.6% of the publications. The important concerns related to the key topics are "polypharmacy", "frailty" and "daily life activity". Visualization map shows inital phase focused on establishing knowledge about OPDJ such as identifying risk factors and predictors of poor outcome, followed by specific challenges and most recent publications focusing on targeted interventions and holistic understanding for continuity of care. United States of America is the central and has significant collaborations in this field. The earliest Asian countries involved were Japan, China and Taiwan. Research methodologies remains diverse. Opportunities remains on how to implement successful models tailored to population and leverage technology.

Conclusion: In conclusion, the key research themes moving towards transitional care programs. This analysis emphasizes the significant of research in this area and provides insights for future direction of intervention. Understanding this trends can help improve care and outcomes for elderly patients.

Abstract Id: CP_77

Muhamad Danial Zulkifli[1 2], Nor 'Izzati Saedon[2], Prof Dr Tan Maw Pin[2], Ooi Ze Yao[2]
[1]Hospital Universiti Kebangsaan Malaysia, [2]Universiti Malaya Medical Centre

Title: Overview and Clinical Outcome of Infection Related Hospitalization of Older Adults in Geriatric Ward

Background: Hospitalization in geriatric patient commonly associated with infection. Ageing, frailty with comorbidities contribute to immunocompromise state which increase risk of infection in older adults. Noticeably, majority of inpatient in geriatric ward are on antibiotic treating for acute infection.

Aim: The aim of the study is to look at the source of infection patterns with antibiotic prescription in association with clinical frailty, outcome and length of stay in geriatric ward.

Methodology: In total, 39 patients in geriatric ward were included during the 2 weeks period from 31 st July 2023- 10 th August 2023 of which patients were treating for acute infection during inpatient stays including hospital acquired infection. Clinical information were obtained retrospectively from electronic medical records for the parameters to meet the study objectives. Source of infection was determined based on primary diagnosis upon discharge including revision of diagnosis after initial investigations result during admission. Duration of antibiotic was based on total number of days of antibiotic including intravenous and oral including duration of oral antibiotic to be continued upon discharge.

Results: Mean age of patients in the study are 79.9 years old. 58.9% (N=23) are female patients. In terms of source of infection, highest source of infection are respiratory tract infection 48.7% (N=19) followed by urological infection 41% (N=16), 10.3% (N=4) has other source of infections including skin, soft tissue and musculoskeletal infections and occult infection. 30.8% (N=12) has bacteremia and 15.4% (N=6) of these patients developed hospital acquired infection during inpatient stay. Average length of stay inpatient were 10.7 days with average length of antibiotics of 10.8 days. From frailty perspective, average Clinical Frailty Score (CFS) 6.2. In terms of outcome, mortality recorded was 12.8% (N= 5) with all these 5 patients has CFS score of 6 and above.

Conclusion: Infection in ageing adults often result in morbidity including prolonged hospitalization, bacteremia, delayed restoration of function and can lead to greater compilation including mortality especially in frail patient. Reducing risk and preventing strategies including vaccination and diabetic control, accurate diagnosis, appropriate antibiotic options and duration are crucial in minimizing complications of infection in ageing adults.

Abstract Id: SO_78

Vilassiny Gunaselvan[1], Azlina Ahmad-Annuar[1], Kalavathy Ramasamy[1], Maw Pin Tan[1]
[1]Universiti Malaya

Title: The Association between Apoe Genotypes, Gut Microbiota, and Cognitive Frailty among the Ageless Cohort

Background: Cognitive frailty, characterised by the concurrent presence of physical frailty and mild cognitive impairment, poses a substantial challenge to ageing populations. Recent studies underscore the intricate interplay between gut microbiota and APOE, particularly in neurodegenerative diseases like Alzheimer's. However, investigations into the associations of cognitive frailty, gut microbiota and APOE genotypes cumulatively remains unestablished

Aim: This study aims to examine the relationship between gut microbiota, cognitive frailty, and APOE genotypes in shaping CF progression among community-dwelling older adults.

Methodology: Blood samples from 1200 participants of the Transforming Cognitive Frailty into Later-Life Self-Sufficiency (AGELESS) cohort will be utilized. Data and samples have been obtained from community-dwelling older participants either first recruited for the Malaysian Elders Longitudinal Research (MELoR) and Towards Unusual Ageing (TUA) cohorts which started in 2013 or as new recruits to replace loss-to-follow up in 2021-22. In addition, stool samples were obtained from200 consenting participants. All 1200 blood samples will APOE genotyped for APOE2, E3 and E4 through PCR amplification targeting specific SNPs, to obtain more accurate allele frequencies at a population level which is validated through Sanger sequencing for accuracy. Concurrently, gut microbiota profiling will encompass alpha and beta diversity assessments, providing insights into microbial abundance and diversity dynamics. Subsequently the APOE genotypes will be compared to gut diversity and abundance statistical analyses, comprising ANOVA, principal component analysis, correlation analyses, and various R packages, will scrutinize the relationships between APOE genotypes, gut microbiota composition, and cognitive frailty scores

Results: Expected outcomes include elucidating the intricate interplay among gut microbiota composition, APOE genotypes, and cognitive frailty progression. The study is ongoing and have yet to discover any results. We hope to generate preliminary findings by end of June

Conclusion: Insights gleaned from this study hold promise for informing targeted intervention strategies, particularly in mitigating the deleterious effects of APOE E4 on cognitive health. This will contribute to the expanding discourse surrounding the gut-brain axis and its implications for cognitive health within aging populations. The findings have potential implications for tailored interventions and healthcare strategies, especially in lowermiddle-income countries like Malaysia.

Abstract Id: CO_79

Jia Qi Lok[1], Nor I'zzati Saedon[1], Maw Pin Tan[1], Hui Min Khor[1]
[1]University of Malaya

Title: Osteoporotic and non-osteoporotic patients presented at UMMC Fall Clinic

Background: Osteoporosis is defined as Bone Mineral Density of less than 2.5 standard deviations below the young adult standard based on the World Health Organization. It is commonly known as a part of ageing which is not entirely inevitable. The impact of fall is further compounded in people with osteoporosis, often resulting in fractures. This can lead to serious consequences such as increased independence, reduced activity and quality of life

Aim: We aim to study the fall complications in osteoporotic patients and to evaluate osteoporosis treatment prescribing at University Malaya Medical Centre (UMMC) falls clinic. We would also discuss the association between falls and osteoporosis with 1) complications, 2) gender , 3) associated medical conditions, and 4) management plan. We hypothesised that the prevalence of fractures in osteoporotic patients is high and is associated with other comorbidities

Methodology: A retrospective cross sectional study was carried out at UMMC Falls Clinic to elucidate the differences between osteoporotic and non-osteoporotic patients, from January 2020 until December 2022. A total of 563 patients who had attended falls clinics were included in this study

Results: This study shows 74.7% of osteoporotic patients were females. Most of the falls occur indoors in both groups, 66% in osteoporotic group, 46.6% in non-osteoporotic group. A total of 63.4% patients suffer from fractures in the osteoporotic group whereas only 12% of the patients are from non-osteoporotic group

Conclusion: Osteoporotic patients are associated with higher risk of fractures among older adults

Abstract Id: SP_80

Ken Joey Loh[1], Wan Ling Lee[2], Alvin Lai Oon Ng[1], Elil Renganathan[1]
[1]Sunway University, [2]Universiti Malaya

Title: iSupport-Malaysia: User insights and usability testing by caregivers of people living with dementia

Background: As Malaysia approaches rapid aging, the number of people living with dementia (PLWD) rises concurrently. Informal caregivers (ICs), typically family members, play a crucial role in caring for PLWDs. However, there is a lack of caregiver interventions in Malaysia to alleviate caregiver burden and distress. This study explores the use of an eHealth intervention, specifically the culturally adapted Malaysian version of the World Health Organisation's "iSupport for Dementia" web-based program (iSupport-Malaysia), to provide free, accessible support and training for ICs nationwide.

Aim: Following the development of iSupport-Malaysia, this study aims to gather user feedback on the e-materials and website interface, and evaluate the usability of iSupport Malaysia.

Methodology: A mixed-methods study will be conducted. After translating iSupport materials into Bahasa Malaysia, creating e-materials (videos, audios, infographics), and developing the iSupport- Malaysia website, focus group discussions and usability testing sessions will be held with ICs of PLWD and experts. Two focus group discussions will be conducted separately for the ICs (n=8) and experts (n=6) to gather qualitative insights into aesthetics, ease of use, user satisfaction, comprehensiveness, and language clarity of iSupport Malaysia. Following content and website refinement, fifteen usability testing sessions will be conducted with the ICs and experts (n=15). The usability testing protocol includes a "Think Aloud" task, System Usability Scale (SUS), and qualitative user feedback. Quantitative measures (frequency of mistakes, help requests, task duration) will be recorded from "Think Aloud" task. Content analysis of text data will be performed by two independent coders.

Results: Findings from "Think Aloud" and SUS will inform the usability of iSupport-Malaysia. Qualitative insights will guide the cultural adaptation of iSupport materials. These findings will subsequently be used to refine iSupport Malaysia to increase user-friendliness and acceptability.

Conclusion: This study evaluates the alpha version of iSupport-Malaysia, considering its usability and acceptability. The finalised iSupport-Malaysia will be used in a pilot randomised-controlled study to assess its effects and feasibility on caregivers' psychological well being.

MCGM 2024

MALAYSIAN CONGRESS OF GERIATRIC MEDICINE

www.mcgm-msgm.com