





Healthy Ageing Conference 2023

Healthy Ageing in Western Pacific: Moving Forward with the UN Decade of Healthy Ageing

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> > ABSTRACT BOOK FOR CONCURRENT SESSIONS

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CS1.1-1

Technology-Assisted Living in Old Age: Fostering Age-Friendly Cities

Grace CHAN¹

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Rapid population ageing in Hong Kong presents challenges and opportunities. Creating inclusive and age-friendly cities requires leveraging technology. This presentation explores technology-assisted living in old age and its role in promoting age-friendly cities from a multidisciplinary perspective.

The World Health Organization (WHO) and partners prioritize age-friendly cities, enabling older adults to lead healthy, active, and independent lives while engaging in their communities. Technology's transformative power offers innovative solutions to address the specific needs and aspirations of older adults within an age-friendly environment.

The presentation delves into integrating technology in age-friendly cities, showcasing its ability to enhance mobility, communication, and participation for older adults, ultimately improving their quality of life. Embracing technology-assisted living within the age-friendly city framework enables older adults to thrive, maintain independence, and actively contribute to their communities.

In conclusion, addressing potential challenges and barriers is crucial. Affordability, accessibility, usability, and digital literacy must be considered. Equitable access to technology and support/training for older adults are essential to overcome these barriers.

CS1.1-2

Caring for Our Elderly Through Technology

Adam CHOW¹

¹ Venture Global Limited, Hong Kong SAR, China

As populations are aging around the world, people are spending more time in poor health conditions. In 2019, the global average time spent in poor health conditions was 10 years, up from 8.6 years in 2000. The COVID-19 pandemic has further exacerbated health risks for the elderly. According to statistics from the Centre for Health Protection, Hong Kong ranks number one in the world for average life expectancy at just under 85 years old.

Consequently, this raises the challenge of how to care for the increasing number of elderly persons while reducing the pressure on and ensuring sustainable development for society. Moreover, most people would like to "age in place," growing older in their own homes or communities surrounded by family and friends. They also prefer to receive care and assistance at home as they age. Therefore, the challenge lies in enabling the elderly to stay safe while remaining in their own homes and potentially reducing costs associated with long-term care facilities and social expenditures.

Thankfully, innovations in elderly technology, such as bed exit alarms, fall detection alarms, and anti-wandering solutions, are boosting safety in both community-based care and care homes. On the other hand, the rise in new technologies will benefit healthy aging and longevity by enabling people to live healthier. For example, technological advancements have been deployed to keep people physically active and enable independent living. These include detecting falls, utilizing smart home technology, early detection of diseases, managing disease conditions, and maintaining social connections to reduce social isolation.

In this century, it is inevitable that we must face the challenges of an aging society globally. Caring for our elderly through technology has become one of the most important ways to improve the quality of elder care. With technology, we can improve the efficiency and safety of elder care in the near future.

Flourishing-Life-Of-Wish Virtual Reality Therapy (FLOW-VRT®): A Randomized Controlled Trial of a Novel Psychological Intervention in Palliative Care

Olive WOO¹ & Antoinette LEE¹

¹ Department of Psychology, The University of Hong Kong, Hong Kong SAR, China

- AIMS Individuals with advanced cancer experience substantial distress and unmet needs in response to disease burden and impending mortality. Unmet needs that have been unaddressed by traditional psychological interventions include unresolved pain (physical), unfulfilled wishes due to bedbound condition (psychological), limited social support (social), and lack of meaning (spirituality). Flourishing-Life-Of-Wish Virtual Reality Therapy (FLOW-VRT) is a brief, structured, manualized, and individualized psychological intervention with theoretical foundations based on stress coping theory, self-determination theory, flow theory, and attention restoration theory. Under the biopsychosocial-spiritual model, FLOW-VRT aims to reduce distress, and promote quality-of-life by addressing the unmet needs.
- METHODS A total of 128 patients with terminal cancer from the adult palliative ward of a hospital in Hong Kong will be recruited. They will be randomly assigned to FLOW-VRT treatment group or treatment-as-usual group. Need assessment will first be conducted, followed by 10 minutes of FLOW-VRT intervention. The session will end with a consolidation and brief review of the intervention. Psychological assessment and interventions as usual practice will be delivered in the treatment-as-usual group.
- **RESULTS** It is hypothesized that FLOW-VRT administered with individual need assessment will bring about more effective symptom control and enhancement of quality-of-life, i.e., improved emotional and physical symptoms, enhanced peace, and lower sense of loneliness and engulfment. The underlying psychological mechanism, i.e., the mediating processes of presence, flow, and restoration that contribute to the symptom control, will be tested as well.
- **CONCLUSIONS** As the physical, psychological, social and spiritual needs are commonly shared among elderly palliative care patients, the results of this study may facilitate policy making to support its wider adoption among patients not only in hospital setting, but also in the community, e.g., elderly home, rehabilitation center, hostel. With appropriate training, future implementation leaders may help increase the accessibility of this cost-effective psychological interventions for healthy aging across the globe.

CS1.1-4 "E-therapist" - Chronic Knee Pain Management For Older Adults

<u>Annie DAI</u>¹, Twiggy Yeuk Hang WONG¹, Jennie Wing Yan LAI¹ & Esther Chui Yan WONG¹ ¹ Hong Kong Sheng Kung Hui Welfare Council Limited, Hong Kong SAR, China

- AIMS The 4-year project aims i) to improve self-management capacity for older adults with degenerative knee pain, and ultimately promote healthy aging; ii) to strengthen social-medical interfacing that result in better management on chronic condition; iii) to promote tele-monitoring and tele-rehabilitation for knee pain management.
- **METHODS** The project adopted a pre-post study design for the 24-week intervention protocol, at baseline, in week 12 and in week 24. 1292 eligible participants were grouped in three categories varied with different rehabilitation plans. 4 key components include pain relieving, weight control, emotional management, and exercise practice.

"E-Therapist"- the Artificial Intelligence mobile application, was developed to facilitate the telerehabilitation through gamified at-home exercise prescription and cultivate the exercise habit for the older adults.

- **RESULTS** 272 completed the pre-post assessment in 24 weeks. The outcome measures of physical performance and health condition, exercise habit, self-efficacy, and attitude towards chronic pain were evaluated. In particular, there is significant improvement on flexibility (F=15.38, p<.000), muscle endurance (F=60.17, p<.000), leg strength (F=33.71, p<.000), mobility (F=24.95, p<.000), and static and dynamic balance (F=9.85, p<.000). The norm values of flexibility at their specific age-gender group increased from 70% to 85%, while muscle endurance was enhanced from 40% to 70%. The high risk of fall decreased from 27.4% to 15.4%. Also, participants' self-efficacy and confidence had remarkably improved (F=3.58, p<.05). As found, participants' age, BMI, and self-reported pain score, the performance of time-up & go test and sit-to-stand test likely indicated their severity of knee pain.
- **CONCLUSIONS** The intervention protocol is effective in alleviating pain symptoms, improving physical and psychological capacity for older adults to manage their knee osteoarthritis. The positive findings also provided the evidence base for self-management care and establishment of exercise habit with the application of the innovative technology.

CS1.2-1 Age-inclusivity Design Strategies in Urban Development

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Rapid population ageing in Hong Kong presents challenges and opportunities. Creating inclusive and age-friendly cities requires leveraging technology. This presentation explores technology-assisted living in old age and its role in promoting age-friendly cities from a multidisciplinary perspective.

The World Health Organization (WHO) and partners prioritize age-friendly cities, enabling older adults to lead healthy, active, and independent lives while engaging in their communities. Technology's transformative power offers innovative solutions to address the specific needs and aspirations of older adults within an age-friendly environment.

The presentation delves into integrating technology in age-friendly cities, showcasing its ability to enhance mobility, communication, and participation for older adults, ultimately improving their quality of life. Embracing technology-assisted living within the age-friendly city framework enables older adults to thrive, maintain independence, and actively contribute to their communities.

In conclusion, addressing potential challenges and barriers is crucial. Affordability, accessibility, usability, and digital literacy must be considered. Equitable access to technology and support/training for older adults are essential to overcome these barriers.

CS1.2-2

The Thermal Sensitivity of the Elderly in Outdoor Environments of Hong Kong Public Housing Estates: A **Usage-Based Analysis**

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AIMS	This study seeks to investigate how the outdoor thermal environment in open squares with various functions affects elderly residents' outdoor activities in public housing estates in Hong Kong and to provide practical recommendations for enhancing thermal comfort in these squares.
METHODS	Two open squares: A basketball playground and a garden area in Choi Hung Estate, were selected to conduct on-site observations, including measurement of thermal environments, jotting down the elderly users and their activities, and random questionnaire survey, from 9:00 to 17:00 on 10 observations days during June to September in 2022. The thermal comfort index Physiological Equivalent Temperature (PET) was used to describe the outdoor thermal environments.
RESULTS	The average PET at the playground is 37.5 °C. Among 2687 elderly were observed in the playground, 24% of the elderly chose to stay in extreme weather with PET temperature over 41°C, while 62.4% chose to stay in the range of 35°C to 41 °C. In contrast, the garden area had an average PET of 32.5°C, we observed 741 elderly here, and 92.4% of the elderly users were found in the PET range from 29.0°C to 35°C. Based on the questionnaire surveys, the comfortable PET in the garden area is found as 31.0°C, while in the playground it is 36.7°C. The elderly residents feel more comfortable when the PET is low in the garden, but this trend is not notable in the playground.
CONCLUSIONS	 Significant microclimate differences exist within a housing estate across different open squares. The average PET in the playground is 5.0 degrees higher than that in the garden area. But the playground had a significantly greater attendance than the shaded garden. The elderly residents show different tolerance of PET based on their usage motivations or the function

CS1.2-3	Aging in Workplace: A Review of Office Lighting Design for the Aging Eyes
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AIMS	The purpose of this review is to compile and organize knowledge to guide workplace illumination and interior design in addressing age-related visual declines.
METHODS	The literature review discusses visual changes related to aging eyes and the impact of lighting, visual ergonomics, interior chromatic setting, and workplace design on well-being.
RESULTS	Research has shown that the lighting needs of individuals with aging eyes differ from those of younger individuals and that incorporating flexible design elements such as adjustable lighting and office design can better accommodate their changing needs, ultimately promoting their comfort, productivity, and well-being. However, existing workplace lighting design guidelines often neglect the needs of those with aging eyes, highlighting a need to bridge the gap between theory and practice.
CONCLUSIONS	Individual needs-based lighting design can offset age-related declining vision in the workplace. More tailored lighting recommendations that consider individual needs are needed.
CS1.2-4	Association between Residential Proximity to Major Roadways and Sleep Health among Chinese Adults 60 Years and Older
	<u>Chi ZHANG</u> ¹ ¹ Xiangya school of nursing, Central South University, Changsha, China
AIMS	Currently, the influence of sleep conditions on cognitive function, mental health, and other diseases of older adults has been effectively explored. However, the relationship between residential proximity to major roadways and sleep health among older adults in developing countries is unclear.
METHODS	We conducted a cross-sectional study using data from the Chinese Longitudinal Healthy Longevity Survey (2018 wave). This study used logistic and linear regression to examine the relationship between residential proximity to major roadways and sleep quality and duration, controlling for demographic characteristics, residential environment, health status, and lifestyle. Moreover, the potential interaction effects were evaluated by subgroup analysis.
RESULTS	A total of 11,969 participants aged 60 years and older (median: 83.0 years) were included, of which 53.8% were female. When sleep quality was the binary variable, and sleep duration was the tripartite variable, older adults whose residence was near the main roadways >300m had better sleep quality (95%CI: 1.05, 1.24), long sleep (95%CI: 1.05, 1.27), but had no significant association with short sleep. When the sleep quality was the tripartite variable, and the sleep duration was the continuous variable, older people whose residence was near the main roadways >300m had better sleep quality. Subgroup and interaction analyses showed that older men and those with hearing loss reported better sleep quality. People with more ventilation and smoking slept longer than those who slept normally.
CONCLUSIONS	Living farther away from major roadways improved sleep quality and long sleep but was not associated with short sleep in elderly Chinese. Therefore, the moderate distance between homes and main roadways may be a strategy for optimal sleep health, and future studies could further validate this association with objective measurement data.

CS1.2-5	From Socio-spatial Experiences to Well-being: Implications for Aging in Place
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AIMS	To examine the effects of various dimensions of socio-spatial experiences on older people's wellbeing.
METHODS	A questionnaire survey with 501 older people aged 65 and above in Hong Kong. Exploratory factor analysis to assess the dimension of socio-spatial experiences. Path analysis to assess direct and indirect effects of the associations between socio-spatial experiences and well-being. Residential satisfaction and place attachment were considered as two serial mediators.
RESULTS	Five dimensions of sociospatial experiences identified: "homes and housing estate," "social environment," "living convenience," "pedestrian experience," and "blue and green" features. All dimensions predict emotional, social, and psychological well-being via residential satisfaction (RS) and then place attachment (PA). PA is a more robust mechanism than RS in the environment–well-being association.
CONCLUSIONS	Developing a satisfying relationship, and subsequently, functional and emotional links with the place of residence, is conducive to achieving well-being. This uncovers an important mechanism of person–environment interactions for aging in place.
CS1.3-1	Exploring the Intentions to Prevent Diabetes amongst Individuals at Risk of Diabetes in Singapore Using the Theory of Planned Behavior (TPB): An Exploratory Qualitative Study
¹ Alice Lee	TEO Jun Yi, Claire ¹ , JIANG Ying ¹ & WANG Wenru ¹ Centre for Nursing School, Yong Loo Lin School of Medicine, National University of Singapore, Singapore
AIMS	To explore and understand the intentions to prevent diabetes amongst individuals at risk of diabetes in Singapore using the domains of the Theory of Planned Behavior (TPB), which includes their attitudes, subjective norms, perceived control over diabetes prevention behaviors as well as suggestions of technological features they find helpful.
METHODS	A qualitative exploratory study using focus group interviews was conducted in both English and Chinese, guided by the TPB. All interviews were transcribed verbatim and analyzed by a bilingual researcher. Data extracted from Chinese transcripts are back translated by another bilingual researcher to ensure meanings are not lost. All data was analyzed using content analysis as detailed by Hsieh and Shannon, where direct content analysis categorizes the main categories under the domains of TPB and summative content analysis elicited the subcategories that emerged within the main categories. To ensure trustworthiness, measures were taken to enhance credibility, dependability, confirmability, and transferability.
RESULTS	One pilot and eight focus groups were conducted with a total of 47 participants. The focus groups elicited 5 main categories and 18 subcategories. Participants were generally knowledgeable regarding diabetes but lacked practical information. They were influenced by interactions with people with diabetes, culture, and family support, although most believed in intrinsic motivations to change. Barriers to change were habits, commitments, and lack of resources while facilitators were starting small, fear of diabetes, kampong spirit and fun activities. Participants also suggested digital prompts, engaging online content and online forums.
CONCLUSIONS	The insights gathered from this study can help healthcare professionals and researchers better understand the intentions to prevent diabetes amongst individuals at risk of diabetes in Singapore. This enables the development of tailored lifestyle interventions geared towards diabetes prevention, in keeping with the "Beyond Healthcare 2020" masterplan in Singapore promoting active ageing and healthy living through preventive health.

CS1.3-2	The Thought Model of Spirituality can Potentiate the Conceptual Synergies of the Spiritual Dimension and Healthy Ageing for better results for Individuals and Public Health Systems in Diverse Communities
	Mahesh BHATT ¹ ¹ MMBSHS Trust, India
AIMS	 To identify the conceptual synergies and conflicts of the spiritual dimension of health in healthy ageing. To evaluate the 'thought model of spirituality' to solve conflicts and promote synergies through understanding the thought processes behind spirituality and healthy ageing and preventing exploitation.
METHODS	We explore the multiple definitions of spirituality and the WHO frameworks of healthy ageing and divide them into conceptual points to understand the thought processes and conceptual synergies and conflicts. And finally, we evaluated the 'Thought Model of Spirituality' in promoting synergies and solving conflicts in the context of a diverse Indian population.
RESULTS	The multiple definitions of spirituality have all positive thoughts of humanity and human values favoring life, health, happiness, and wellbeing in common, with numerous complexities and ambiguities. WHO frameworks of healthy ageing echo the similarities with thought processes of spirituality, making them synergistic, resulting in a common observation that people gradually become more spiritually inclined with age. But the complexities and ambiguities of religiosity and spirituality create conflicts, and people get into the trap of exploitation. The 'Thought Model of Spirituality' defines spirituality scientifically through the evolutionary journey of human thought processes. It considers the spiritual thought process the most evolved human thought process superior to religiosity and provides a simple definition of spirituality, abolishing complexities and ambiguities independent from religions.
CONCLUSIONS	made the Spiritual Dimension the fourth health dimension. But the historical proximity of spirituality with religiosity makes the situation conflicting, complex, and ambiguous for healthcare providers and older adults in religious but diverse Indian communities. The 'Thought Model of Spirituality' can abolish all of them as it helps define spirituality as an independent thought different from religiosity on an evolutionary basis.
CS1.3-3	Five-Tone Therapy for the Elderly with Kidney Essence Deficiency Type Dementia Applied Study of Psychobehavioral Symptoms
	Wei LIU ¹
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AIMS	To explore the clinical efficacy of TCM intervention on mental behavior symptoms, cognitive function and TCM syndrome in the elderly with kidney sperm deficiency type dementia.
METHODS	Randomized controlled trial study. Sixty-six patients with dementia who met the inclusion criteria were selected. The control group adopted the routine nursing method, and the experimental group added TCM pentagram therapy on the basis of the control group. The intervention effect of the two groups of patients was evaluated by general data questionnaire, concise neuropsychiatric questionnaire (NPI-Q), Simple Intelligent Mental State Scale (MMSE), and TCM syndrome score table.
RESULTS	1. Mental behavior symptoms: Total NPI-Q scores decreased after the intervention ($P < 0.05$). The total NPI-Q score of the post-intervention test group was lower than that of the control group, and the difference was significant ($P < 0.05$). 2. Cognitive function: The MMSE score slightly increased after the intervention and was statistically significant ($P < 0.05$); the patients in the control group MMSE score slightly decreased after the intervention and was not statistically significant ($P > 0.05$). The total MMSE score of the post-intervention test group was slightly higher than that of the control group and was significant ($P < 0.05$). 3. Chinese medicine syndrome: The two groups' total score decreased after the intervention, and the difference was significant ($P < 0.05$). The total score of the post-intervention test group was lower than that of the control group, and the difference was statistically significant ($P < 0.05$).
CONCLUSIONS	Five-tone therapy can improve psycho-behavioral symptoms, cognitive function and related TCM signs and symptoms in elderly people with dementia with kidney essence deficiency.

CS1.3-4 Prospective Intolerance of Uncertainty, Loneliness and Mental Health Problems in Hong Kong Older Adults

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AIMS	Older adults' mental health is one of the important components of healthy ageing. However, the mental health situation appeared to have deteriorated during the stressful COVID-19 pandemic, when social interactions were deprived. This study focused on examining the roles of loneliness and intolerance of uncertainty (IU) on the mental health of older adults in Hong Kong, and identified the sources of stress and joy of older adults during the worst wave of the COVID-19 pandemic.
METHODS	Cross-sectional data were collected using a telephone survey from March to May 2022. A total of 2,258 older adults aged over 60 years participated. Level of loneliness, prospective IU (IU-P), and mental health were assessed. In addition, sources of stress and joy were revealed.
RESULTS	Using logistic regression analysis, it was found that older adults who had higher levels of loneliness and IU-P were more likely to have poor mental health. IU-P was a significant mediator of the relationship between loneliness and mental health. Further regression analyses showed that the key stressors for the older adults were: getting the virus, unknown future, and loneliness, and these were risk factors for poor mental health. On the other hand, family/friends, peace of mind, and hobbies were key protective factors for good mental health.
CONCLUSIONS	Extending previous literature, IU-P was found to be an important risk factor for poor mental health for older adults in Hong Kong. On the other hand, the protective factor of peace of mind appeared to be unique in Asian cultures. Implications of the findings to promote older Chinese adults' mental health will be discussed.

CS1.3-5

Interventions to Improve Social Network in Older People with Sensory Impairment: A Systematic Review

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- AIMS To summarize interventions designed to improve social network in older people with sensory impairment.
- **METHODS** We searched the databases Cochrane Library, MEDLINE, Web of Science, EMBASE, CINAHL, CBMdisc, CNKI and Wangfang from inception to April 15,2023. Randomized controlled trials (RCTs) and quasi-experimental studies focused on interventions for social network in older people with sensory impairment were included. Two reviewers searched databases, extracted data and assessed the quality of included studies independently.
- **RESULTS** Eight studies enrolling 701 older people with sensory impairment were included, of which five RCTs and three quasi-experimental studies. Among the included studies, six studies were conducted on older people with hearing impairment, one study on older people with hearing and/or vision impairment, and one study on elderly individuals with both hearing and vision impairment. All included studies used the method of selecting a partner to participate in the studies with older people, which could be a family or friend. The interventions included hearing aids or lenses and health education with communication partners such as how to understand sensory impairment, analyze communication needs, use communication strategies, etc. The intervention duration of included studies varied from 15 minutes to 2 hours per time, ranging from 5 to 12 weeks. Most studies showed a positive impact of the interventions used in older people with sensory impairment.
- **CONCLUSIONS** The content and frequency of interventions for social network in older people with sensory impairment varied greatly. Intervention researches in this field in China still needs to be developed and explored. Researchers should further explore the impact mechanism of the social network of older people with sensory impairment and develop multidisciplinary collaborative intervention plans to help improve the social network of older people with sensory impairment. In addition, due to limitations in research quality and heterogeneity, the above conclusions still require further validation from more high-quality original studies.

The Relationship between Electronic Health Literacy and Health-related Quality of Life among Chinese Older Adults and the Mediating Role of General Self-efficacy: A Three-wave Longitudinal Study

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AIMS	The pace of population aging keeps increasing. Improving health-related quality of life (HRQoL) of the elderly is of great importance for achieving healthy ageing. The Internet provides extensive health information, and effectively utilizing the electronic health (eHealth) resources (reflected as eHealth literacy) potentially empower older adults to manage health and improve HRQoL. However, there is a lack of evidence about the effect of eHealth literacy on HRQoL. This study aims to examine longitudinal effect of eHealth literacy on HRQoL among Chinese older adults and the underlying mechanisms.
METHODS	From February to November 2022, a three-wave longitudinal study was conducted in Jiangxi Province, China, among older adults aged 55 or over. Data were collected at baseline (T1), 3-month (T2), and 6-month follow up (T3) by online self-reported questionnaires. The Digital Health Literacy Instrument, General Self-efficacy Scale, and EQ-5D-5L were used to measure eHealth literacy, self-efficacy, and HRQoL, respectively.
RESULTS	A total of 611 participants were included at T1 and 464 of them (75.9%) completed the three-wave surveys. The multivariate lineal mixed model suggested that eHealth literacy was positively associated with HRQoL (adjusted β and 95% CI: 0.023 (0.011, 0.035), p<.001), after accounting for covariates and repeated measures. In the cross-lagged panel model, the cross-lagged paths leading from eHealth literacy at T1/T2 to HRQoL at T2/T3 were found to be significant (standardized $\beta = 0.09$, p=.008), while the paths from HRQoL at T1/T2 to eHealth literacy at T2/T3 were non-significant, after controlling for covariates. In addition, general self-efficacy was found to fully mediate the relationship between eHealth literacy (T1) and HRQoL (T3) (indirect effect and 95% CI: 0.015 (0.004, 0.029), p=.02, mediated proportion 28.3%).
CONCLUSIONS	This study highlighted the importance of eHealth literacy and general self-efficacy in improving HRQoL among Chinese elderly, providing robust evidence and implications for future interventions.
CS1.4-1 An Ov	verview of the Health System Towards Healthy Ageing in the Philippines
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AIMS	Focused Interventions for Frail Older Adults Research and Development Project (FITforFrail) Study 1, a nationwide and ethics-approved study aimed to analyze the health system for older persons (OPs) in the Philippines.
METHODS	Guided by the WHO building blocks of health system and healthy ageing framework, mixed methods were utilized. Policy review, 8 focus group discussions, 19 key informant interviews, survey among 120 OPs, and facility-based listing of OP-dedicated services and workforce in 27 Department of Health Geriatric Centers and 17 health centers across the country were conducted from 2019-2020. The study population includes policy makers, primary care implementers, hospital administrators, healthcare providers, and OPs themselves. NVivo PRO plus and STATA were used for the content analysis and descriptive statistical analysis, respectively.
RESULTS	Findings include policy gaps on preparedness and responsiveness of the health system to the needs of OPs during public health crisis or disaster. Health services specific to OPs are available but variable. The lack of trained staff who can implement programs for OPs, inability to meet the needs of OPs related to leading causes of morbidity, and lack of health information system that captures their needs, conditions, and resource requirements were identified to be the major constraints of the system.
CONCLUSIONS	Policies and laws to protect the health of OPs are in place. Translation of these policies and laws into programs that result in improved services and comprehensive care for OPs leaves much to be desired. The study provided a snapshot of how the health system fares in relation to the WHO healthy ageing framework. A national monitoring and evaluation program for implementation of healthy ageing interventions was recommended to be put in place, with instruments for quality improvement at the level of health centers, hospitals, cities, provinces, and regions. Policy briefs specific for OPs were generated from this study.

Assessing Health System Strengthening Needs for Healthy Ageing in Fiji

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AIMS The combined trends of accelerated ageing and rising prevalence of chronic diseases represent major challenges for Pacific Island health systems. The ability of Pacific governments to 're-orient health systems to respond to the needs of older people' is hindered by a lack of knowledge of what's needed and what works for the care of older persons in their context. The Healthy Ageing Fiji study sought to explore the appropriateness, acceptability and usability of health system responses to population ageing. **METHODS** Twenty-two focus groups and 28 semi-structured interviews were conducted with policymakers, civil society organisations, health workers, and older persons and their families across all four divisions of Fiji. Using the COM-B (Capability, Opportunity, Motivation, Behaviour) model as a framework, thematic analysis of transcripts was undertaken to identify user preferences and areas of unmet need. RESULTS Poor health and disability impaired older adults' ability to seek health care, to socialise and to actively contribute to income generation. Older adults voiced preference for the provision of health and social services at village-level: Accessibility issues (transport, roads, distance) were cited as barriers to seeking care, particularly in rural and maritime areas. An ill-equipped health workforce and under-resourced clinics influenced older adults' reluctance to use services, with many citing poor health worker attitudes and long wait times as deterrents. Health workers and caregivers expressed limited knowledge and skills related to the health care needs of older adults and emphasised the need to better equip caregivers with the tools required to support older adults ageing at home. Older adults feared loneliness, loss of independence and family abandonment as they become more vulnerable with age. CONCLUSIONS In the context of limited health resources, models of care that emphasise a person-centred community-based

approach to the care of older persons in Fiji may optimise healthy ageing.

CS1.4-3 Effects of a Continuing Care Program Based on the Long-Term Care Insurance Policy for Stroke Survivors: A Quasi-Experimental Trial

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AIMS	The study was to evaluate the effectiveness of the continuing care program on the activity of daily life, the degree of disability, stroke recurrence and readmission in patients with stroke, based on the long-term care insurance policy.
METHODS	Eighty-eight stroke patients were recruited from February 2021 to January 2022. They were allocated to either intervention group (N = 44) or control group (N = 44) based on whether the long-term care insurance application was successful. The intervention consisted of discharge education, 3-month in-home care and remote counseling. The activity of daily life, disability, recurrence and readmission of patients were evaluated between the groups before the intervention, at 1, 2, 3 and 6 months after discharge.
RESULTS	There were no statistically significant differences between the groups in clinical characteristics at baseline. We detected significant interaction effects between time and group (p < 0.001), indicating that the scores of two outcomes changed differently over time in intervention and control groups. It was found that the participants of the intervention group had a statistically significant improvement in activity of daily life and disability than the control group at baseline and follow-up periods. The decrease in readmission of the intervention group was statistically significant than in the control group (2=6.040, p=0.014; 2=7.216, p=0.007) at 1 and 2 months after discharge, but no significant difference was found at 3 and 6 months after discharge. At follow-up, there was no significant difference between groups regarding stroke recurrence rates ($p > 0.05$).
CONCLUSIONS	This study demonstrates the positive effects of a continuing care program based on the long-term care insurance policy on activity of daily life and disability in people with stroke. The effectiveness and feasibility of this intervention program suggest that its application should be promoted to promote the care and rehabilitation of stroke patients.

CS1.4-4	Healthy Ageing Domains and the Differences between Gender among Older Adults in Thailand
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AIMS	We aim to establish the domains measuring healthy ageing and examine the differences of each domain among male and female older persons in Thailand.
METHODS	We use the secondary data derived from the Survey of Older Persons in Thailand 2017 conducted by Thai national Statistical Office. Adults 60 years old and older were extracted from total 41,752 data. Twentynine indicators from the survey were chose to analyzed in the model, based on conceptual framework of Healthy ageing by WHO. Within each gender, the exploratory factor analysis was employed to explore the domains, additionally Varimax rotated component matrixed results was used to interpret the data.
RESULTS	Total of 34,051 data were included in the analysis. Twentynine indicators were classified into 8 domains, showing similarity in both genders following the healthy ageing concept. The domains included Activities of Daily Living (ADL) (e.g. put on clothes, take a bath), physical capacity (e.g. ability to carry things more than 5 kg, walk 200-300 m), physical health (e.g. defecation, urination), cognitive function (e.g. vision, hearing), community participation (e.g. participate in funeral, senior group), healthy behaviors (e.g. drinking water, exercise), unhealthy behaviors (e.g. smoking, alcohol) and physical-psychological well-being (e.g. happiness, self-rated health). Kaiser-Meyer-Olkin (KMO) measures was 0.89 for female (p<0.001) and 0.90 for male (p<0.001). Correlation magnitudes among factors ranged from 0.02 to 0.83. ADL domain shows 17.7% of variance in Rotation Sums of Squared Loading, followed by physical capacity 11.7%, and physical health 6.3%.
CONCLUSIONS	The study demonstrates the validity of healthy ageing domains, provided measurements following the WHO conceptual framework. All domains were resemblance regarding genders differences, proving the gender equity of in measurement.
CS1.4-5	Transforming Mental Health Care in Hong Kong: Policy Recommendations for Achieving Healthy Ageing
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AIMS	As mental health needs are integral to overall well-being, it is impossible to achieve healthy ageing without addressing them across all age groups of the population. This study seeks to capitalise on the momentum generated by the WHO's World Mental Health Report and the Mental Health Review Report in Hong Kong by providing policy recommendations that will transform the existing mental health system structures and innovate care models.
METHODS	The research team, with guidance from Professors Terry Lum and Eric Chen, conducted interviews with 77 key stakeholders from various sectors, facilitated two focus groups with mental health service users, and collected opinions from key service providers through questionnaires. The team mapped the mental health service landscape, identified service gaps and challenges in accessing suitable services, examined international service models, and analysed how community capacity, particularly at the primary care level, can be leveraged to provide mental health services in Hong Kong.
RESULTS	The study recommends that the government optimize service accessibility in non-hospital settings, such as mobilising general practitioners and family medicine specialists to provide mental health services to stable patients with common mental disorders. The government should also re-evaluate the role of Integrated Community Centres for Mental Wellness (ICCMWs) and leverage District Health Centres (DHCs) to coordinate mental health support in the community. To improve accessibility of low-intensity interventions, the government should strengthen formal care models through optimising stepped care, drawing inspiration from the UK model of Improving Access to Psychological Therapies (IAPT) and local programs such as the JC JoyAge Project. Finally, the study recommends that the government explore the use of a multidisciplinary data communication system and refine the mental health policymaking process.
CONCLUSIONS	The study provides feasible policy recommendations to transform Hong Kong's mental health system into a person-centered, primary care-led, and integrated system to achieve healthy ageing.

CS1.4-6 What Affects the Demand for Long-Term Care Insurance? A Study of Older Adults in Lanzhou Qing WANG ^{1,2}, Xiaotong DING ¹, Yan WANG ³, Jiyuan SHI ¹, Lin HAN ², Zheng LI ¹ ¹School of Nursing, Chinese Academy of Medical Sciences & Peking Union Medical College, China ² School of Nursing, Lanzhou University, China ³School of Nursing, Sun Yat-sen University, China AIMS This article aims to estimate willingness to pay (WTP) for long-term care insurance(LTCI) and explore the determinants of demands for LTCI in Lanzhou. **METHODS** A face-to-face survey was conducted from May 2019 to October 2019 to collect data from 509 older adults in Lanzhou, northwest China. RESULTS The financial status of 18.8% of older adults can fully support the pension, and 33.2% can barely support the pension. 73.3% of older adults live near no nursing home. Less than one-fifth of older adults were willing to buy ITCI, and 53.8% would not like to buy LTCI. Multivariate analysis reveals more nuanced characteristics of Lanzhou, older people who tend to show a demand for LTCI, including (a)being younger, having long medication duration; (b) being in a better financial situation and able to afford premiums; and (c) only one child. The main reasons for buying LTCI are saving money on elderly care in the future and reducing the care burden of family members. The median of WTP for LTCI was estimated at 534 RMB/month. The 1-3 hours/daycare time is acceptable for 44.3% of older adults. CONCLUSIONS Older adults in Lanzhou have a high demand for nursing and medical treatment but have a low willingness to buy long-term care insurance. Financial conditions and understanding and acceptance of long-term care insurance are the main factors influencing WTF. Considering that financing is one of the most significant challenges in developing China's LTCI, we suggest that policymakers consider an individual contribution as an important and possible option as a source of financing for LTCI. Associations of Body-Roundness Index and Sarcopenia with Cardiovascular Disease among Elderly Adults: CS1.5-1 **Findings from CHARLS** Xiaona ZHANG¹, Linlin DING¹, Zhihan LI¹, Hao JIANG¹, Zhenfang XIONG¹, Xinhong ZHU¹ ¹ School of Nursing, Hubei University of Chinese Medicine, Wuhan, China This study aimed to assess the capacity of sarcopenia and BRI to identify subjects with CVD. AIMS **METHODS** We used data from the China health and retirement longitudinal study 2011 to 2018. A total of 6152 participants aged 45 or above were classified into the following groups: neither sarcopenia or high BRI, sarcopenia only, high BRI only, and both sarcopenia and high BRI. Sarcopenia was defined according to the Asian Working Group for Sarcopenia 2019 criteria. CVD was defined as the presence of physiciandiagnosed heart disease, diabetes and/or stroke. The associations of BRI and sarcopenia with CVD risk were explored using Cox proportional hazards regression models. RESULTS During the 7 years follow-up, 2385 cases (38.8%) with incident CVD were identified. Longitudinal results demonstrated that compared to neither sarcopenia or high BRI, high BRI only (HR:1.22, 95% CI: 1.09, 1.37), and both sarcopenia and high BRI (HR: 1.49, 95% CI: 1.08, 2.07) were associated with higher risk of CVD. In the subgroup analysis, individuals with both sarcopenia and high BRI were more likely to have new onset stroke (HR: 1.93, 95% CI: 1.12, 3.32) and increased risk of multimorbidity (HR: 2.15, 95% CI: 1.14, 4.04). CONCLUSIONS Coexistence of sarcopenia and high BRI was associated with higher risk of CVD. Early identification and intervention for sarcopenia and BRI not only allows the implementation of therapeutic strategies, but also provides an opportunity to mitigate the risk of developing CVD.

Effectiveness of a Self-Determination Theory-based Intervention for Nursing Home Residents with **Depression: A Randomized Controlled Trial**

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AIMS	This study investigated whether SDT alleviated the depressive symptoms of nursing home residents.
METHODS	From September 2020 to August 2021, 60 nursing home residents living in Shenyang were selected and divided into a control group and intervention group, with 30 patients in each group. The control group underwent a routine physical activity program and the intervention group received a physical activity program based on SDT. Both groups were followed up for 24 weeks after the 24-week intervention. Depression scores were measured using the Geriatric Depression Scale.
RESULTS	The incidence of depression was 45.65% at baseline and 10% at 24 weeks after the intervention. By 24 weeks after the intervention, depression scores in both groups had decreased (F = 19.309, P < 0.001). At 12 weeks after the intervention, the difference between the intervention group and the control group was evident (t = -2.23, P = 0.03). A greater improvement in depressive symptoms was observed in the intervention group than in the control group.
CONCLUSIONS	A physical activity intervention based on SDT proved effective for nursing home residents with depressive symptoms. These findings support the view that an SDT-based intervention could be combined with physical activity interventions for nursing home residents with depressive symptoms.
	earch Hotspots and Emerging Trends on Older People with Subjective Memory Complaints in the Past Years: A Bibliometric Analysis
¹ Chin	Xiaotong DING ¹ , Jiyuan SHI ¹ , Xiuxiu SHI ¹ & Zheng LI ¹ ese Academy of Medical Sciences; School of Nursing, Peking Union Medical College, China
AIMS	To explore the development trends, hotspots, and structural knowledge network related to subjective memory complaints (SMC) on older people in the past 20 years.
METHODS	The study conducted a bibliometric analysis based on co-citation analysis. This study obtained 950 manuscripts published from 2001 to 2020 regarding SMC on older adults from the Web of Science Core Collection database. Software CiteSpace was used to analyse the results for countries, institutions, journals, authors, keywords, top-cited papers, and burst citations scientifically and intuitively.
RESULTS	The number of articles has a fluctuating rising trend. The United States (citation counts were 257 times) occupied a dominant position in the national cooperation, and the highest cited institution was the University of Melbourne (citation counts were 43 times). The journal of Neurology had the most significant number of co-citations (citation counts were 734 times). Frank Jessen was the most cited author (citation counts were 33 times). Based on clustering analysis, the keywords clustering were "ApoE", "epidemiology", "physical activity", "positron emission tomography", and "neuroendocrinology". The keywords with the strongest citation bursts were "validation", "frailty", "prevention", and "anxiety".
CONCLUSIONS	Parallel to the growing trend, the range of research scopes and topics is expanding steadily, focusing on early screening and prevention, negative emotion, and symptom management, broadening researchers' perspectives. Future studies should explore the screening indicators with high sensitivity and specificity, focusing on creative strategies to delay the AD process early and continue to pay attention to the relationship

between negative emotions and cognitive impairment.

	D Home Care Program and Community Assessment": During the epidemic wave, Using New Service and Innovative Equipment to Provide Care Service for COPD Patients Living in the Community
	Hazel S.T. YIM ¹ , Hon Ming MA ¹ , Tom W.T. TSO ¹ , Bonnie M.Y. WONG ¹ , Adeline C.T. TSANG ¹ , Alvin C.K. NG ¹ & Franky I.P. WONG ¹ ¹ Christian Family Service Centre, Hong Kong SAR, China
AIMS	"Chronic Obstructive Pulmonary Disease (COPD) is one of the major chronic diseases in Hong Kong, it's prevalence ranging from 9% to over 20%. The unplanned readmission rate within 28 days post discharge from hospitals over one-third in Kowloon East areas. Besides, during the Covid -19 pandemic, most of the COPD patients become home bounded and socially isolated which easily lead to unplanned admission to hospitals during this critical period. So, this project was initiated to help those patients to stay healthy in the community.
METHODS	This is a 10 months pilot project which a new service model of using both home based education & modified exercise training; and center-based rehabilitation training with innovative rehabilitation equipment to provide caring service to the participants. Some validated assessment tools, pre & post questionnaires have been used, such as MBI, Lawton IADL; CAT, MRC score while 6MWT is used to reveal the effectiveness of the rehabilitation exercise training.
RESULTS	For home-based service, 147 participants were recruited with significantly 72.1% reported they can master the COPD disease while 33.8% stated they have improvement on the proper use of inhalers and medications. For center-based rehab training, there are totally 34 participants receiving 7 weeks home based modified exercise training and 4 weeks (2 times per week) center-based rehab training with innovative rehab equipment such as chest percussion and vibration therapy & breathing & coughing exercise and cardio-pulmonary training with 10% of participants showed improvement in 6 MWT while the rest remained stable without deterioration. For ADL aspects, MBI & Lawton IADL remained unchanged without deterioration with nearly 50% participants responded they achieved 3 personal goals after the project.
CONCLUSIONS	This project received positive feedback from the participants and could be used as a model to develop community COPD service and screening in the near future.
	cy of Cognitive Remediation on Activities of Daily Living in Individuals with Mild Cognitive rment or Early-Stage Dementia: A Systematic Review and Meta-Analysis
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AIMS	Instrumental activities of daily living (IADL) are vital for healthy ageing and community-based living. Little is known about the impact cognitive remediation has on IADL performance for individuals with mild cognitive impairment (MCI) or early-stage dementia. The aim was to evaluate the effectiveness of cognitive remediation on improving or maintaining IADL performance in older adults with MCI and early-stage dementia.
METHODS	A systematic search of Medline, EMBASE, CINAHL, PsycInfo and the Cochrane Central Register of Controlled Trials was conducted. Randomised control trials published from 2009 to 2020, detailing cognitive remediation interventions targeting performance in IADL in older adults with mild cognitive impairment or early-stage dementia were included. Relevant data was extracted and analysed using R software's 'metafor' package with a random effect model with 95% CI.
RESULTS	Thirteen studies, totaling 1414 participants, were identified in the narrative analysis. The results of the meta- analysis, inclusive of 11 studies, showed that cognitive remediation elicited a significant improvement in IADL performance (SMD: 0.16, 95% CI $0.00 - 0.31$). There was insufficient evidence of any lasting effect.
CONCLUSIONS	Cognitive impairment from MCI and early-stage dementia greatly affects IADL performance, highlighting the need for intervention. Cognitive remediation shows immediate positive effects on IADL performance, but lacks sufficient statistical evidence for long-term effectiveness. Although promising, limited RCTs and small sample sizes prevent firm conclusions about cognitive remediation's effectiveness. Further studies with larger samples and longer follow-up periods are necessary to assess its immediate and long-term impact on IADL performance.

CS1.5-6

The Analysis of Clinical Characteristics and Influence Factors of Falls in 5143 Elderly Inpatients from Multi-Centers in Hunan, China

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- AIMS Inpatient falls are common adverse events in hospitals, particularly among older adults who are at high risk. The objective of this study was to analyze the clinical characteristics of falls in elderly inpatients and investigate the factors influencing more than moderate fall injuries.
- **METHODS** Based on the China National Database of Nursing Quality, the data of 5143 elderly inpatients who reported fall in 67 hospitals in Hunan, China from 2019 to 2022 were analyzed. The clinical characteristics were described, and logistic regression analysis were used to explore the influence factors of more than moderate fall injures.
- **RESULTS** Among the 5143 elderly inpatients who experienced falls, 2955 (57.5%) were male and 2188 (42.5%) were female. The highest prevalence of falls (42.0%) was reported in the internal medicine wards. Most falls occurred between 4-8 a.m. (23.6%). The most common activities during falls were using the toilet (38.2%) and getting in/out of bed (18.5%).

Approximately 48.8% of falls occurred in elderly inpatients who were free to move. The overall fall injury rate was 63.2%, with 75.0% classified as no or mild fall injuries and 25.0% as more than moderate fall injuries. Logistic regression analysis revealed that sex, ward, mobility, and activity type were independent risk factors for more than moderate fall injuries (P < 0.05).

CONCLUSIONS Falls in elderly inpatients are more common in internal medicine wards, female, free-moving patients, mainly happened when they were using the toilet, and most often occurred in 4-8 a.m. The fall injuries rate was at a moderately to high level. More than moderate fall injures were influenced by a few factors, and the management to internal medicine wards and female ambulant patients should be strengthened, and attention should be especially paid to elderly inpatients when they are going to toilet.

CS2.1-1 Users as Co-designers: Co-creating a Social Robot with Elderlies

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Co-creation with users is a method that is increasingly applied in various social innovation projects. This presentation aims at revealing the design and production process of "Tung Zai", a voice-interactive social robot produced by the Jockey Club Design Institute of the Hong Kong Polytechnic University, with members of an Elderly Center by means of participatory design methods. "Tung Zai" has been deployed in the Elderly Center to facilitate information dissemination and communication between the centre staff and its senior members. The idea of producing the Tung Chai robot was proposed by an elderly member, and the design and co-creation process took place during the COVID-19 lockdown. This sharing will put the emphasis on how physical tools, the set-up and process design, and the sharing of decision-making power through Internet video conferencing software and research design facilitate the co-creation process with elderlies regardless of their education levels to create the social robot. The technical functions powered by the artificial intelligence of the robot, its impact on the social participation of the elderly who participated in this co-creation process and the potential of the development of the robot will also be featured.

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Co-design, a collaborative approach that involves actively engaging end-users in the research process, has gained recognition as an effective method for developing inclusive and user-centered solutions. This presentation focuses on the application of co-design principles in research involving older people. It highlights the importance of involving older individuals as equal partners in research, acknowledging their expertise and lived experiences. The session will discuss key fundamentals of co-design, including establishing meaningful partnerships, fostering inclusive and respectful communication, and incorporating older adults' perspectives throughout the research process. By adopting a co-design approach, researchers can gain valuable insights into the unique needs, preferences, and challenges faced by older people, leading to more relevant and impactful research outcomes. The presentation emphasizes the significance of co-design as a framework for promoting age-friendly research practices and encourages researchers to embrace collaborative approaches when working with older individuals.

CS2.1-3 Co-creating a Sensor-Enabled Urban Green Care Farm (S-FARM) with Older Citizens in Hong Kong: Challenges and Opportunities

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Participatory design (PD) is one of the most important ways to innovate the healthcare environment. However, most conventional PD methods in architecture are not fully appropriate for people with dementia as they require a high level of abstract ability. Studies focusing on architectural PD methods and people with dementia is limited. Green Care Farms is an emerging long-term care model in Europe where population density where people with dementia participate in outdoor farming activities. Currently, little is known about Green Care Farms in a compact urban environment like Hong Kong. Moreover, although the mixed reality technology is gradually recognised as a cognitive enhance model that can ultimately lower the burden of caregivers, it has rarely been discussed in the context of green care farming. We proposed an integrated spatial model – a Sensor-enabled Urban Green Care Farm (S-FARM) to advance dementia care in a compact city. We conducted six PD workshops to explore the "S-FARM" in two long-term care settings: A residential care home and a community day care centre. Customised PD toolkits were provided to support people with dementia in the creative process. A total of 27 participants, including older people with and without dementia and caregivers from two care facilities joined the workshops. We compared the participation of people with and without dementia and learnt about their general attitudes towards urban care farms and digital interface design. We also reflected upon the appropriateness of the customised toolkits and offer insights on how they could be improved. This study implies that PD processes and toolkits may need a more flexible and relational approach. This study contributes to the development of future PD approaches when working with people with dementia.

CS2.2-1	Effect of Exercise Cognitive Combined Training on Physical Function in Cognitively Healthy Older Adults: A Systematic Review and Meta-Analysis
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AIMS	Exercise-cognitive combined training may improve physical function of older adults, but evidence is inconsistent. Moreover, it is not clear whether there are differences in effects between simultaneous and non-simultaneous combined training. This study aimed to evaluate the effectiveness of exercise-cognitive combined training on the physical function of cognitively healthy older adults, and the differences in effects between simultaneous and non-simultaneous combined training.
METHODS	Databases were searched for randomized controlled trials from inception to December 2, 2021. The Cochrane Risk of Bias and Grading of Recommendations Assessment, Development, and Evaluation tools were used for quality assessments. Subgroup analyses and publication bias were evaluated. The registration number in PROSPERO is CRD42020189861.
RESULTS	Twenty-two studies (1,091 participants, Mean age = 74.90) were included in this review. Exercise-cognitive combined training improved gait speed (mean difference [MD]: 0.06 m/s, 95% CI [0.02, 0.11]; 446 participants, eleven studies) and balance (standardized MD [SMD]: 0.38, 95% CI [0.14, 0.61]; 292 participants, seven studies). Simultaneous exercise-cognitive combined training, but not non-simultaneous combined training, improved gait speed (MD: 0.11 m/s, 95% CI [0.07, 0.15]), balance (SMD: 0.40, 95% CI [0.16, 0.64]), and functional mobility (MD: -0.85 s, 95% CI [-1.63, -0.07]; 327 participants, nine studies).
CONCLUSIONS	Simultaneous exercise-cognitive combined training can improve gait speed, balance and functional mobility in cognitively healthy older adults, and should be given priority when trying to prevent physical decline of older adults. Future research should focus on the duration and form of exercise-cognitive combined training intervention optimal for improving the functional activities of older individuals.

CS2.2-2

Electronic Bibliotherapy for Informal Caregivers of People with Dementia: A Qualitative Analysis of Caregivers' Perceptions

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AIMS	The objective was to investigate the perceptions of informal caregivers providing care for individuals with dementia regarding an electronic bibliotherapy intervention.
METHODS	Qualitative interviews were conducted with caregivers who participated in a pilot randomized controlled trial of electronic bibliotherapy. Caregivers from the intervention group were purposively sampled for inclusion. Individual interviews were undertaken to explore their perceptions of engaging in the intervention. Thematic saturation was used as a criterion for ceasing the interview. Content analysis was employed for data analysis.
RESULTS	Twenty caregivers were interviewed in this study. The findings revealed positive feedback regarding the e- bibliotherapy intervention, with caregivers expressing feelings of relaxation, satisfaction, and flexibility. The intervention manual was deemed valuable and effective, while the videos were universally comprehensible and lucid irrespective of the age of the caregivers. The intervention led to a change in caregivers' caregiving appraisal and coping strategies. Additionally, caregivers demonstrated an increased focus on their own well-being and self-care when confronted with caregiving challenges. Suggestions for enriching content were put forth, including incorporating additional social support information and more situational examples. Furthermore, participants expressed interest in integrating more interactive elements into the videos to enhance engagement.
CONCLUSIONS	The present study demonstrates the acceptability of electronic bibliotherapy as an intervention for informal caregivers of individuals with dementia. The innovative use of videos in this intervention was found to be a convenient and effective method for caregivers to comprehend and assimilate the intervention manual. Furthermore, the implementation of this intervention was associated with improvements in psychological well-being. These findings underscore the potential integration of e-bibliotherapy into caregiver support programs targeting informal caregivers of individuals with dementia.

CS2.2-3 Social Prescribing for Healthy Ageing

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The Western Pacific region is undergoing significant demographic changes, marked by a rapidly ageing population. This transition poses challenges related to healthy ageing, particularly in light of the increasing prevalence of non-communicable diseases among older individuals. Social prescribing emerges as a pivotal intervention to address these demographic shifts and enhance the quality of life for older individuals.

While the region confronts healthcare challenges associated with an ageing population, social prescribing offers a structured approach to promote physical activity, address mental health concerns, and provide nutritional guidance. It also seeks to combat the growing issue of social isolation and loneliness among older adults by connecting them with community-based activities, support networks, and cultural events. The region's rich cultural diversity necessitates a culturally sensitive approach to social prescribing.

There are noteworthy examples in the region, initiated by government, hospitals, and communities, showcasing the potential of social prescribing in fostering healthy ageing and social participation. Collaborative research, evaluation, and partnerships with local healthcare providers and community organizations are crucial for the effective implementation of social prescribing. This holistic approach empowers older people in the Western Pacific to age gracefully, enjoying socially engaged, fulfilling lives amid the evolving demographic landscape.

CS2.2-4 White Matter Engagement of Resting-State fMRI in Aging People

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AIMS	Our study aims to measure the changes of blood signal strength in the white matter in aging adults, and to prove the blood oxygen signals in white matter (WM) have physiological significance and can be a neuroimaging biomarker.
METHODS	The fMRI data processing method followed a previous study (Li et al., 2020), and details on obtaining the WM engagement maps are illustrated in Figure 1.
RESULTS	As age increases, there is less engagement in certain regions such as the right anterior thalamic radiation, right superior corona radiata, and left inferior fronto-occipital fasciculus. However, there is more engagement in the left hippocampus.
CONCLUSIONS	This decline seems to affect executive functions, emotion/impulse regulation, attention, and visual-spatial skills. However, an increase in hippocampal seems to compensate for memory dysfunction.
	nation of Online Aerobic Training and Resistance Training in Older People with MCI: A Three-Arm omized Controlled Trial
	Xiuxiu HUANG ¹ , <u>Qiaoqin WAN</u> ¹ , Shifang ZHANG ¹ ¹ School of Nursing, Peking University, China
AIMS	To evaluate the effects of six-month online aerobic training and resistance training in older people with mild cognitive impairment (MCI).
METHODS	A total of 108 participants were recruited, and equally randomized to aerobic group, resistance group, or control group. Cognitive functions were evaluated at baseline, the 13rd week (T1) and 26th week (T2). Effects were evaluated by linear mixed effects model after controlling for covariates. The dose-effect relationships were analyzed. Inter-individual differences on the cognitive effects were explored.
RESULTS	Fifteen (13.89%) participants dropped out. The median compliance rates were 67.31% for aerobic group and 93.27% for resistance group. The results revealed that ADAs-cog scores in aerobic group decreased by 2.14 points at T1 and 1.70 points at T2 more than the control group. In resistance group, the ADAs-cog scores decreased by 1.42 points more than the control group at T1. For executive function, the Stroop time interference in resistance group at T2 declined 11.37 seconds more than the control group, and 13.56 seconds more than the aerobic group. Our results confirmed a nearly significant dose-effect relationship between aerobic exercise duration and global cognition changes (β = 0.37, p = 0.051). A true inter-individual difference existed in the responses of global cognition to aerobic training, which was affected by compliance rates, social activity participation, spouse, and family history of cognitive impairment. The inter-individual difference in the responses of executive functions to resistance training was only influenced by executive function at baseline.
CONCLUSIONS	Online aerobic training and resistance training are feasible in older people with MCI, and both have positive effects on global cognition. Resistance training is more conducive to improving executive function. A positive dose-effect relationship exists between aerobic exercise and global cognition. The inter-individual differences in cognitive responses to aerobic and resistance training are affected by different factors.

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AIMS This study aimed to analyze and evaluate the effect of the Aged Care Clinical Mentoring Model in nursing homes in China.

METHODS	A 6-month cluster randomized controlled trial was conducted in July 2020. The intervention group
	participated in mentoring activities as described in the Aged Care Clinical Mentoring Model. The nursing
	homes in the intervention group provided monthly feedback on their care service quality indicators. The
	study was conducted in 16 nursing homes, involving 528 nursing staff and 278 older people, in five cities
	in Hunan Province, China. Ethical approval was obtained from the medical ethics committee of the Chinese
	Clinical Trial Registry (No. ChiCTR-IOC-17013109). Measurements were taken at 0, 1, 3, and 6 months,
	and the data were analyzed using generalized estimating equation methods.

- **RESULTS** Participants in the intervention group showed significant improvements in their perception of the qualityof-care score (95% CI = 0.046, 0.200; p = 0.002) and the quality of life of dementia residents (95% CI = 0.269, 4.534; p = 0.027) compared to the control group over the baseline and six-month period. The incidences of falls, severe fall injuries, and pressure ulcers in the nursing homes of the intervention group demonstrated a relatively stable or decreasing trend over time.
- **CONCLUSIONS** This study revealed the benefits of the Aged Care Clinical Mentoring Model in improving the perception of the quality of care of residents with normal cognitive function, and quality of life among residents with advanced dementia in Chinese nursing homes. The care quality indexes' results indicated that adverse events' occurrence was closely related to the quality-of-care services.

CS2.3-3 Effects of an Medication Management Mobile App on Medication Safety and Blood Pressure Control in Elderly Patients with Hypertension: Protocol for a Randomized Controlled Trial

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- AIMS Hypertension is one of the most common chronic diseases that threaten the health of the elderly. Elderly hypertensive patients have more medication-related problems such as wrong and missed doses. Comprehensive and effective medication management may be an important strategy to ensure medication safety and and improve blood pressure (BP) control in elderly patients. However, little is known about the impact of app-based medication management on elderly hypertensives. The study aims to examine the effectiveness of app-based medication management in improving medication safety and BP control in elderly hypertensives.
- **METHODS** The study is a small-scale parallel two-arm trial. Elderly patients with hypertension will be assigned to the app-based intervention or waitlist by the block randomization method with a ratio of 1:1. The 12-week intervention will include app-based medication review, tailored medication education and reminding, medication behavior monitoring, BP monitoring, immediate medication counseling and referral, and two weekly follow up. Patients in the waitlist continue to receive routine care from nurses, including medication education, online pushing of disease science articles, and counseling on patients' treatment during visits. The primary outcomes are online medication monitoring records and BP measurement records. Secondary outcomes include medication self-management ability, medication literacy, and quality of life assessed online at baseline, 4 weeks, and 12 weeks of intervention.
- **RESULTS** The incidence of medication errors (wrong dose, missed dose, etc.) may be lower in the intervention group than in the control group, and the rate of BP control may be higher. Scores for medication literacy, and quality of life may be higher in the intervention group than in the control group at 4 weeks, and 12 weeks of intervention.

CONCLUSIONS The adoption of the medication management app has the potential to improve health outcomes in elderly hypertensives, and will add to the growing knowledge of mHealth to improve medication safety.

CS2.3-4

Effects of Mind–Body Exercises on Women with Menopause: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

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AIMS	To systematically examine the efficacy of mind-body exercises (MBEs) to improve the severity of menopausal symptoms, menopause quality of life (QOL), hot flashes, negative emotions, clinical outcomes and sleep quality among women with menopause.
METHODS	Eight electronic databases, including PubMed, Web of Science, PsycINFO, Science Direct, EMBASE, Cochrane CENTRAL, ProQuest Dissertations & Theses, and CINAHL, were searched from inception to 01/03/2023. Randomized controlled trials with MBEs interventions for women with menopause were included. The quality of the included studies was assessed using The Cochrane Risk of Bias Tool v2. Meta-analysis was performed using RevMan5.3.
RESULTS	A total of 1673 articles were initially identified. Eventually, 21 studies were included in this review. The mean age of women ranged from 55.3 to 55.5 years old in the intervention and control groups, respectively. The results of the overall risk of bias indicated that ten studies had low risk, eight studies had some concerns, and three studies had high risk. Four types of intervention were identified, including Yoga (n = 15), Pilates-based exercises (n =2), Dance (n = 2), Taichi (n = 1), and Qigong (n = 1). The pooled analysis showed that MBEs had significant beneficial effects on the severity of menopausal symptoms (p = .0002), QOL (p = .007), sleep quality (p < .00001), depression (p < .00001), and clinical outcomes (BMI: p < .00001, SBP: p < .00001, DBP: p < .00001). However, there is no difference between the MBEs and usual care for hot flashes and anxiety.
CONCLUSIONS	MBEs significantly improved menopausal symptoms, QOL, sleep quality, depression, and clinical outcomes among women with menopause. MBEs could be recommended as an add-on integrative intervention for improving menopause-related outcomes. Future studies should adopt a rigorous design to evaluate the effects and the efficacious treatment component and modalities of MBEs on menopause-related outcomes among women with menopause.
CS2.4-1 De	evelopment and Evaluation of Cognitive Impairment Screening Tool Based on Eye Tracking Technology
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AIMS	This study aimed to develop a cognitive impairment screening tool based on eye tracking technology (ET-CIS), and apply ET-CIS to community-dwelling older adults to evaluated its screening performance.
METHODS	ET-CIS were developed based on through systematic review, pre-experiments and expert consultation. We recruited older people in the community from July 2022 to November 2022 and collected data including demographics data, Montreal cognitive assessment, the mini-mental state examination, ET-CIS. The t-test and correlation analysis were conducted to screen out statistically significant parameters with of ET-CIS. The screening models were constructed using standardized score assignment, binary logistics regression analysis, and decision tree model in the training set, and were applied in the validation to evaluate the screening performance. The best model was selected as the final scoring model.
RESULTS	ET-CIS was constructed including applicable objects, pre-assessment preparation, screening dimensions, specific experiments and parameters. A total of 301 subjects were included, including 163 in the cognitively normal group and 138 in the cognitive impairment group. The results showed that the decision tree model results showed that the sensitivity of the training set was 0.752 and the sensitivity of the validation set was 0.818. We use the decision tree model as the final model.
CONCLUSIONS	In this study, ET-CIS was developed including the evaluation of memory function, executive function, visuospatial function and abstract function. The screening model of ET-CIS in community-dwelling older people showed good discrimination, which demonstrated it could be used to effectively screen cognitive impairment in the community in the future.

CS2.4-2	Association of Work Ability, Work Environment, and Work-Life Satisfaction with Functional Ability among Older Employees: An Exploratory Study
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AIMS	Functional ability is a factor of healthy aging. This study explores among older employees (aged 50 years and above as of 30 June 2020) of the University of the Philippines Manila (UPM) the association of work-related variables such as work ability, work environment, and work-life satisfaction with the components of functional ability: 1) meeting basic needs; 2) learning, growing, and making decisions; 3) being mobile; 4) building and maintaining relationships; and 5) contributing to society.
METHODS	An online survey was conducted among 71 older employees from September 2, 2022 until October 14, 2022. The qualitative data about communication, transportation and employee well-being initiatives like annual physical examinations, trainings, and webinars from ten key informant interviews complemented the quantitative data on work-related variables. Descriptive analysis using Statistical Package for the Social Sciences (SPSS) and inferences based on literature was employed to associate work-related variables with functional ability components.
RESULTS	Older employees avail career advancement, develop new skills, and acquire knowledge as well as cope with tension and stress which support learning, growing, and making decisions. Their mobility is facilitated through Zumba sessions, available transportation, and accessible facilities. Collaborations and partnerships among offices build and maintain good relationships. Annual physical examinations contribute to basic needs, and because older employees experience joy, value, and contentment through work, their psychological needs are likewise met. Furthermore, they also contribute to society through quality education and health research. It can be inferred that functional ability is affected by work ability, work environment, and work-life satisfaction.
CONCLUSIONS	Older employees are functionally able and, thus, they are leaning towards healthy ageing. UPM should sustain and promote healthy aging through comprehensive well-being programs for its employees, young and old.
CS2.4-3	Is Weaker Sense of Coherence Associated with a Higher Risk of Chronic Disease? A Systematic Review of Cohort Studies with Meta-Analysis
² WHO Coll	Yaqian LIU ¹ , Angela Yee Man LEUNG ^{1,2} & Jed MONTAYRE ^{1,2} ¹ School of Nursing, The Hong Kong Polytechnic University, Hong Kong SAR, China aborating Centre for Community Health Services, School of Nursing, The Hong Kong Polytechnic University, Hong Kong SAR, China
AIMS	Sense of coherence (SoC), a concept developed by Antonovsky, has been associated with various health outcomes. While a higher SoC has been traditionally linked to better health and well-being, recent studies suggest that it may also have implications for the risk of chronic illness; however, this has not been systematically synthesized. This systematic review aims to examine the relationship between SoC and the risk of chronic illness through a comprehensive analysis of cohort studies.
METHODS	A systematic search was conducted in PubMed, Embase, Web of Science, Medline, and PsycINFO with publication date from January 1979 to May 2023. Cohort studies examining the association between SoC and the risk of chronic illnesses were included. The Newcastle-Ottawa Scale (NOS) was used to assess the quality of included studies. Random-effects meta-analysis was performed to calculate pooled effect estimates, and heterogeneity among studies was assessed using the I ² statistic.
RESULTS	The initial search yielded 1,245 articles, of which 12 cohort studies met the inclusion criteria. The studies included a diverse range of chronic illnesses, such as cardiovascular diseases, diabetes, cancer, and chronic lung disease. Weaker SoC were found to be associated with a 36% increased risk of developing chronic illnesses (pooled hazard ratio: 1.36; 95% confidence interval: 1.17-1.59). Subgroup analyses based on specific chronic illness types showed consistent associations, although some variations were observed.
CONCLUSIONS	This systematic review and meta-analysis indicate that a weaker SoC may increase the risk of developing chronic illnesses. The findings highlight the need for a comprehensive understanding of the role of SoC in health outcomes and the development of preventive strategies that consider individuals' SoC levels. Future research should explore potential interventions to strengthen SoC and mitigate the risk of chronic illness.

Experiences of Level 3 Certified Geriatric Nurse Specialists (GNS) and their Contribution to Improve Quality of Geriatric Care Services in Government Retained Hospitals in the Philippines

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AIMS	This study describes the experiences of GNS on Geriatric Care Services in six areas: 1) direct geriatric care; 2) indirect geriatric care; 3) creativity and innovation; 4) rewards and recognition; 5) facilitators and barriers to improve the quality of Geriatric Care Services; and 6) Geriatric Care Services institutionalized for the 1st time.
METHODS	Descriptive Survey Method. Data was collected using standardized questionnaire encoded in Google Form. 25 GNS were invited. Response rate was 84%. Descriptive statistics were used to analyze the data.
RESULTS	The GNS experiences in Geriatric Care Services were mostly in the area of direct geriatric care. Some experiences were in areas of indirect geriatric care, and in creativity and innovation. Most of them were recognized as trained clinical preceptors by the Gerontology Nurses Association of the Philippines (GNAP), Inc. for Geriatric and Gerontology Nursing Training Program (GGNTP). The expanded roles of most GNS were facilitated by the support of all stakeholders, which allowed them to demonstrate what they have been trained for. On the other hand, the major barrier to improve these services were the lack of support and cooperation by stakeholders, and the lack of recognition about their GNS roles and what Geriatric Care Services entail. However, by hurdling these challenges, 13 Geriatric Care Services were institutionalized, showing GNS experiences mostly in creativity & innovation, some in indirect geriatric care, and to a lesser extent, in direct geriatric care.
CONCLUSIONS	The integration of competencies in activities of direct patient care and indirect patient care by the GNS explained the institutionalization of structured, science-based, quality geriatric care services in the institution where geriatric units are being established for the first time. Better nursing situations were defined providing increase knowledge of geriatric patients. Opportunities for leadership and management, interdisciplinary collaboration, and upgrading nursing workforce were demonstrated.
	ajectories of the Frailty Index and its Relationship with Intrinsic Capacity: A 14-year Population-Based hort Study
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AIMS	This study aims to (1) identify frailty trajectories and estimate the association between intrinsic ability (IC) impairment and baseline demographic and clinical characteristics; (2) quantify the association between the IC and frailty trajectories; and (3) compare the value of frailty and IC in predicting adverse outcomes among older community-dwelling people in England.
METHODS	Individuals aged 50 and older (n=6068) from the English Longitudinal Study of Aging (ELSA) 2004–2018 were analyzed. We applied group-based trajectory models to identify latent groups and estimate their trajectories. Multinomial logistic regressions were applied to examine relationships among sociodemographic, health behaviors and trajectory groups.
RESULTS	Three trajectories were identified: stable, slow increase, and rapid increase. The findings revealed that older age, widowhood and multimorbidity may increase the rate of decline. Conversely, higher education levels, 'never' or 'quit' smoking statuses, and 'partnered' marital status exhibited protective effects, thereby slowing the rate of decline. Furthermore, the dual-trajectory analysis found that after 14 years of follow-up, the frailty index (FI) showed greater volatility than IC, especially for those with lower IC scores.
CONCLUSIONS	Early identification of frailty development and timely intervention are crucial initiatives aimed at mitigating the aging process and reducing the incidence of adverse outcomes. The FI and IC are both indicators of healthy aging, and further research is needed to investigate the mechanisms by which the FI and the IC interact, thereby providing insights that can inform the development of effective strategies for promoting healthy aging.

CS3.1-2

Work-related Stress among Paid Carers of Elderly Inpatients with Physical Disabilities: A Qualitative Phenomenological Study

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- AIMS This study aimed to explore the views and experiences of adults caring for older people with physical disabilities in hospital, with a focus on work-related stress and coping strategies.
- **METHODS** It was a Qualitative Phenomenological study. Ten paid caregivers from a tertiary comprehensive hospital in Hangzhou City, who had a range of background in providing care for elderly inpatients with physical constraints were engaged, then semi-structured, in-depth, one-to-one, face-to-face interviews were conducted, guided by open-ended questions that focused on gathering rich insights into participants' views and experiences. Ten group conversations were conducted, audio-captured, and transcribed manually. Thematic analysis was employed to evaluate the data, adhering to a six-step process for decoding and evaluating qualitative data. This study was guided by Lazarus and Folkman's theory of transactional coping.
- **RESULTS** Four themes were identified from the data analysis: (1) "perceived threat", demonstrated the exacting workload of paid carers furnishing 24-hour bedside care to meet the wide-ranging requirements of disabled elderly inpatients, which was physically exhausting but also psychologically straining. (2) "perceived motivation", including internal and external motivation, guided by 'money-making' aim of the work. (3) "multifaceted coping", including problem-based coping, problem-based coping and meaning-based coping, participants were actively involved in various interventions in order to deal with the stress of work. (4) "adaptive coping outcomes", Various stress-coping measures led an individual to attain adaptive changes.
- **CONCLUSIONS** The paid carer is one of the most important members of the geriatric multidisciplinary team, and a stable, high-quality group of formal carers has an extremely important function in the quality of care and quality of life of patients. Paid caregivers face multifactorial burdens and coping with a stressful situation, caring for their physical and mental health is rewarding and meaningful.

CS3.1-3

Research Hotspot and Visual Analysis of Discharge Planning for Older People Based on CiteSpace

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- AIMS To investigate the status, hot spots and trend of the research on discharge planning among older adult at the time of hospital, and in order to provide reference on the development for nurses to discharge within the interprofessional team in a high quality and outcomes.
- **METHODS** Literature retrieval was conducted through the Web of Science core collection database. Foreign literatures in the field of discharge planning for older people published before June 1, 2023, were retrieved. The retrieved literatures were included and analyzed by publication trend analysis, keyword co-occurrence analysis, co-citation analysis and mutation word analysis by Citespace.6.2.R3.
- **RESULTS** A total of 298 literatures were included from 1998 to 2023, and the overall trend of literature publication was increasing year by year. The top volume by three country was USA, Australia and Canada. Besides, the 10 keywords included this topic were elderly patient, care, discharge planning, mortality, risk, hip fracture, transitional care, intervention, randomized controlled trial and follow up. In addition, the 5 keywords with strongest citation burst were follow up (2001),predictors and intervention (2004),older adults (2008) and readmissions (2018).What's more, the hot topics were summarized into four aspects, which were management service (Orthopedics and Emergency),comprehensive geriatric and risk factors assessment, family caregiver and long-term care plan.
- **CONCLUSIONS** We should pay more attention to strengthen international exchanges and cooperation in the management of elderly discharge planning. Launching geriatric service combine with other specialties and home care in Chinese community. We can promote the elderly service with geriatric assessment, identify risk factors for hospital discharge and helpful advices by community services to caregivers, from hospital to home.

CS3.1-4 Ageing Effect on Physiological Regulation towards Sensory Stimulation in Older Women

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AIMS Sudden loud noise may frighten people and cause emotional disturbances. This study aims to identify the ageing effect on the physiological regulation towards auditory stimulation in older women.

METHODS A total of 46 female older adults aged from 65 to 74 were recruited. They were divided into two groups: Group A (65-69 years old; n = 28; mean age = 66.71, SD = 1.33), and Group B (70-74 years old; n = 18; mean age = 72.16, SD = 1.17). All participants received a 10-minutes sensory paradigm in a sitting position. The paradigm consists of 3 consecutive phases in a sequence of baseline (resting) - auditory stimulation (a block of unpredicted loud noise) - recovery (resting). The physiological responses of the participants were measured by a finger-type Jinmu pulse analyzer. The data of the meridians of traditional Chinese medicine was collected.

RESULTS There was no significant difference on the baseline meridian levels between the two groups. In Group A, there was no significant difference in the meridian levels across the three phases. In Group B, the meridian levels (spleen: p = .01; lung: p = .02) were decreased significantly upon receiving auditory stimulation, but the meridian levels returned to the baseline level after auditory stimulation was removed.

This study provides preliminary evidence that ageing may have an influence on the physiological regulation CONCLUSIONS towards auditory stimulation. The unpredicted loud noise may lead to a greater but temporarily decrease of spleen and lung meridian levels on older women after 70 years old. The findings of this study may shed light on the understanding of sensory challenges encountered by the elderly in daily living and potential implications on mental and physiological health in an ageing population. Recruitment of a large sample, extended age range and male participants in future research is recommended.

CS3.1-5 Geriatric and Gerontology Nursing Workforce Capacity-Building and Development: A Collaboration in Advancing Healthy Aging and Shaping Better Care of Older Persons in the Philippines

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- AIMS This paper presents a development framework of the Geriatric and Gerontology Nursing Training Program (GGNTP), a collaboration between the Department of Health (DOH) Nurse Certification Program (NCP) and the Gerontology Nurses Association of the Philippines (GNAP). GGNTP is a partnership of an interdisciplinary team to contribute to the safe and better health of Filipino older persons by fostering an environment of wellinformed, educated health professionals in geriatric and gerontology nursing in the Philippines.
- **METHODS** The actions and processes undertaken included workshops, consultations, facility observations, integrative peer reviews, and curriculum mapping. It is crafted after the DOH NCP levels 3 and 4 competencies and the Professional Regulatory Board of Nursing standards, career progression and specialization levels 6 and 7. Instructional designs were developed using competency-based and outcome-based approaches.
- RESULTS GGNTP is a three-month mentorship program that uses hybrid-blended learning approaches. A total of 139 competencies were identified, grouped into 13 categories. Nine modules comprising 148-hour didactic, 400hour practicum in diverse facilities with varying levels of care were created. There were four level 5 certified core faculty, eight-expert lecturerstrainers. Clinical preceptors were selected from previous batches who completed the Preceptorial Leadership Training in Clinical Teaching. Endtraining deliverables include a final examination, case report, research, and re-entry-action plan. Four batches of trainings have been conducted, producing 132 graduates from DOH retained hospitals across the Philippines. Thirty-three graduates underwent certification assessments and of those, twenty-five received Level 3 certification.
- CONCLUSIONS DOH-GNAP scaled-up a stronger, more inclusive geriatric and gerontology nursing care, training, and education producing knowledgeable nurses with the competencies to lead and manage nursing services in an interdisciplinary approach. The overall outcome contributes in advancing healthy aging and shaping better care services for the Filipino older persons. GGNTP has been grounded to serve as a Philippine framework for geriatric and gerontology nursing workforce capacity-building and development.

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	Influence of Social Disengagement and Depression on Sleep Quality of Dementia Caregiving Dyads: Findings from a National Study
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AIMS	The aim of this study was to examine the influence of social disengagement and depression on the sleep quality among people with dementia and their primary informal caregivers, as well as the actor-partner interdependence nature of these influences.
METHODS	Cross-sectional data from 310 older adults with dementia and their care partners (dyads) from a national survey were analyzed. Social disengagement was measured by several items assessing the extent health/caregiving kept the person from doing valued activities. Depressive symptoms were measured by the Patient Health Questionnaire, and sleep quality was measured by trouble falling back to sleep and interrupted sleep. Descriptive statistics and the actor-partner interdependence model were used for analysis. Structural equation modeling was used to measure the mediation effects of depression inside the actor-partner interdependence models.
RESULTS	Among the 310 dyads, the average age of people with dementia and their care partners were 86.5 (SD, 5.8) and 63.4 (SD, 14.1) respectively. The majority of caregivers were direct family members, such as spouses (21.3%), daughters (47.7%), and sons (14.8%). The actor-partner interdependence model showed a significant actor, direct effect of social disengagement on the sleep quality of caregivers, and a significant mediation effect of depression between social disengagement and sleep quality. In people with dementia, social disengagement could only have an actor effect on sleep quality via the mediation of depression. In terms of partner effects, the social disengagement of caregivers could influence the patient's depression, via which both partners' sleep quality could be influenced. Social disengagement and depression in people with dementia could directly influence the sleep quality of their caregivers.
CONCLUSIONS	The sleep quality of caregivers could be directly affected by the social disengagement and depression of both care partners. However, the sleep quality of people with dementia was only influenced by their own depressive symptoms.
	The Impact of Hospice Training on Intern Nursing Students based on the Concept of Participatory and Interactive Teaching
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AIMS	To conduct hospice training based on the concept of participatory and interactive teaching for undergraduate intern nursing students, and to evaluate its effects on nursing students' attitudes toward death and hospice care of and the effectiveness of training.
METHODS	Undergraduate nursing students were recruited voluntarily and divided into intervention and control groups according to whether they participated in the hospice training or not. The control group received clinical practice learning, while the intervention group received hospice training based on clinical practice, including theoretical lectures, scenario simulations and interactive group discussions based on the concept of participatory interactive teaching. We used a combination of quantitative and qualitative methods to analyze the changes in death attitudes, hospice attitudes and training feedback of the two groups.
RESULTS	The hospice attitude score of the intervention group (104.662 ± 11.539) was higher than that of the control group (98.910±7.107), and the difference was statistically significant (P<0.05). Both groups of undergraduate intern nursing students' attitudes toward death tended to be naturally accepted, and there was no statistical difference on each dimension between the groups. After the training, the nursing students gave good feedback on the effectiveness of participatory and interactive teaching, and we extracted three themes: "popularize death education is necessary" "be empathetic" and "focus on self-emotional regulation".
CONCLUSIONS	Hospice training based on the concept of participatory and interactive teaching helps to improve the attitude of hospice care of undergraduate intern nursing students and to face patients' death properly in the future. The training method based on the concept of participatory and interactive teaching was recognized by nursing students, and this study provides a reference for promoting hospice work and training in China.

CS3.2-2 Managing the Covid-19 Pandemic in Care Homes and Long-Term Care after Covid-19

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AIMS	Hong Kong is one of the most densely populated places in the world, advanced age, underlying frailty and communal living environment make nursing home residents especially vulnerable. The severity of the fifth wave of the epidemic has had a great impact on residential care homes. According to the Government data from 31 December 2023 till 29 January 2023, there were 13,115 deaths in the 5th wave of Covid-19, 47% were older people in care homes. Some of the residents who recovered from Covid-19 began reporting chronic cough, weight loss, cognitive dysfunction and physical deterioration. This topic will present the measures to cope with the epidemic by the care homes of Hong Kong Sheng Kung Hui Welfare Council.
METHODS	Two exploratory surveys were conducted to assess the post Covid-19 symptoms and the service needs of the residents in 2022 and 2023.
RESULTS	Preliminary evidence suggests that active rehabilitation, nutrient rich food and supplements may hasten recovery.
CONCLUSIONS	Proper clinical evaluation will help to customize treatment and care.

CS3.2-3 Research on the Cross-Cultural Adaptation and Feasibility of the Communication Education Program for Older Adults with Hearing Loss

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- AIMS This study aims to adapt the communication education program in China for older adults with hearing loss, explore the feasibility and acceptability, and analyze the facilitative and hindering factors of the intervention program.
- **METHODS** According to the heuristic framework, this study made cross-cultural adaptation to the communication education program. We translated the program after obtaining the authorization for the Australian Version; Focus group interviews were conducted with 12 older adults with hearing loss to understand their acceptance and adjustment suggestions of the program; We organized expert meetings to discuss the contents to be adjusted. Then, we conducted a feasibility analysis of the communication education program. The convenience sampling method was used to recruit older adults with hearing loss in the Hunan Province district. The participants were assigned to the intervention group (n=12) or the control group (n=14). The control group independently learned the content of the communication education manual, and the intervention group received five offline group activities and online discussions. This study evaluated the feasibility and acceptability of the program using the self-designed questionnaire.
- **RESULTS** Cultural adaptations of the program include: translating the intervention program, adjusting the intervention objects and intervening personnel, and improving the implementation content of the communication education program. Twelve people in the intervention group showed good compliance with the intervention and high satisfaction, and the communication education program after debugging was feasible and acceptable. Scientific and practical content, peer support, strong motivation to participate, benefits to social interaction, and positive guidance are promoting factors. The obstacles include competing priorities, lack of motivation to participate, poor acceptance of intervention content, and insufficient family support system.

CONCLUSIONS The communication education program that has undergone cross-cultural adaptation is in line with China's cultural background and seems feasible; the initial effect is good, but it still needs further verification.

CS3.2-4	Oral Exercise for Improving Oral Function in Elderly People: A Systematic Review and Meta-Analysis
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AIMS	The present review aimed to evaluate the effect of oral exercise on oral function in elderly people.
METHODS	A systematic review of randomized controlled trials (RCTs) and quasi-experimental studies was conducted. Six databases, including CINAHL, EMBASE, PsyINFO, Cochrane Library, PubMed, and CNKI, were searched from inception to April 29, 2023. Two reviewers screened and selected eligible studies independently. The Cochrane Collaboration's risk of bias tools for RCTs and quasi-experimental studies were used to assess the methodological risk bias of included studies as appropriate. Meta-analysis and narrative synthesis were used for data analysis.
RESULTS	Total 10 RCTs and 7 quasi-experimental studies involving 1035 participants were analyzed in the present systematic review. The mean age of participants was 75.94 years, 79.23% of the participants were female. Oral exercise significantly improved oral function of elderly people in terms of salivate secretion (SMD: 0.93; 95% Confidence Interval [CI]: 0.55 to 1.31, p <0.0001), occlusal force (SMD: 0.93; 95% CI: 0.26 to 1.17, p=0.002) and masticatory (SMD: 0.91; 95% CI: 0.31 to 1.51, p=0.003).
CONCLUSIONS	This review was the first to evaluate the effect of oral exercise on oral function in elderly people. The results suggest that current evidence supports the benefit of oral exercise in promoting oral function in elderly people. However, randomized controlled trials with larger sample size and rigorous methodology should be carried out to verify the effectiveness of oral exercise. Moreover, the intervention frequency and duration of oral exercise should be standardized in the future studies. Qualitative evaluation of experience and perception of elderly people on oral exercise would be necessary to inform the intervention refinement.
CS3.3-1	The Modified Behavioral Activation Treatment Training Program for Primary Medical Staff to Manage Depressive Symptoms among Rural Elderly: Stakeholder Perspectives
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AIMS	Across the globe, elderly with depressive symptoms in rural areas have limited access to mental health care through public services. This qualitative study aimed to understand stakeholders' perceptions of conducting modified behavioral activation treatment (MBAT) training program in rural areas, and to explore potential barriers and facilitators to delivery and implementation.
METHODS	Focus groups were conducted with 20 stakeholders, including 2 township hospital leaders,14 primary medical staffs, and 4 rural elderly people with depressive symptoms (The GDS score ranged from 11 to 25).Discussions focused on perspectives on the use of the MBAT training program.Themes were identified through consensus coding, starting from an exploratory framework.
RESULTS	Participants suggested that the MBAT training program should include comprehensive theoretical knowledge and practical exercises, and follow-up sessions with healthcare professionals.Barriers including increasing the workload of primary medical staff and the financial cost of mental health services,While potential facilitators include alleviating depressive symptoms in the rural elderly, improving the psychological service capacity of township hospitals.All participants endorsed the MBAT training program, but should be provided within a standardized system to ensure accessibility.
CONCLUSIONS	We found that the MBAT training program was largely considered acceptable and feasible to deliver, but there were some practical barriers. These findings may have importance to non-specialist delivery of the psychological skills training programmes in other rural regions.

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AIMS	Older adults may have an identity crisis that affects physical and mental health due to declining social status and abilities. Resilience is the process of successfully adapting to difficult or challenging life experiences, which plays an important role in identity reconstruction. The study is aimed to explore the experience of older adults with an identity crisis to understand how they could be resilient and rebuild their identity.
METHODS	A qualitative research design was conducted. We used semi-structured in-depth interviews with 16 older adults (aged 63 to 85 years; 11 men and 5 women) in Beijing, China, who had an identity crisis. A thematic analysis was undertaken using NVivo 11.0 software.
RESULTS	We identified an overarching theme "integration of internal and external cognition", which means the more deeply older adults interact with the age-friendly environment around them, the more consistent their identity cognition is with external evaluation, and the faster resilience develops. It consists of three stages. (I) Defense: The older adults feel worthless, use their originally accumulated resilience to escape or struggle, and interact superficially with the external environment; (II) Remodeling: The older adults feel belonging, use open-mindedness and dialectical ability to accept and participate, and interact deeply with the environment; (III) Development: The older adults feel contribution, use creativity and flexibility to find the personal interest, adjust goals and infect others, integrate constantly into the changing environment, and build the core of their identity.
CONCLUSIONS	The findings provide useful measures to promote the resilience of identity reconstruction for older adults through the different characteristics of the three stages. We should tap and develop the positive capital of the elderly, and create age-friendly environments to achieve healthy aging.
CS3.3-3 Mi	gration, Stress and Successful Aging: A Mixed Methods Study
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2 ³ L	Department of Psychology, The Chinese University of Hong Kong, Hong Kong SAR, China Department of Sociology, The Chinese University of Hong Kong, Hong Kong SAR, China Department of Social work, The Chinese University of Hong Kong, Hong Kong SAR, China The present work aims to explore the stress and coping related to successful aging among migrant and non-
2 ³ <i>I</i> AIMS	 Department of Psychology, The Chinese University of Hong Kong, Hong Kong SAR, China Department of Sociology, The Chinese University of Hong Kong, Hong Kong SAR, China Department of Social work, The Chinese University of Hong Kong, Hong Kong SAR, China The present work aims to explore the stress and coping related to successful aging among migrant and non-migrant grandparents. Both qualitative and quantitative methodologies were employed. 21 grandparents (12 migrants) in mainland China were interviewed about the definition of successful aging, as well as stress and coping related to successful aging based on ecological systems theory. Another 303 grandparents (92 migrants) were recruited to complete some questionnaires about intensity of grandparenting, proactive coping, successful aging, as

Social Interaction, Lifestyle, and Depressive Status: Mediators in the Longitudinal Relationship between Cognitive Function and Instrumental Activities of Daily Living Disability among Older Adults

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AIMS	Older adults display a high prevalence of disability in instrumental activities of daily living (IADL). Cognitive impairment has been found to be related to the incidence of IADL disability. However, the mechanism underlying the association between cognitive function and IADL disability is still unclear. This study aimed to examine the relationship between cognitive function and IADL disability with social interaction, depression, and lifestyle as mediators in older adults and compared the differences in mediating effects between these three mediators.
METHODS	This study used data of wave 2008 (baseline) and wave 2014 of Chinese Longitudinal Healthy Longevity Surveys. Structural equation modeling was conducted to examine the mediating effect of social interaction, lifestyle (fruit and vegetable intake; exercise habits), and depressive status on the association between four baseline cognitive function dimensions (measured by the Chinese version of the Mini-Mental State Examination) and five (2014) IADL dimensions (visiting neighbors, shopping, preparing meals, washing clothes, and taking public transportation).
RESULTS	Among 1976 older adults, 29.1% developed IADL disability 6 years later. The cognition–disability association was completely mediated by social interaction (estimate = -0.095 , p < 0.001), lifestyle (estimate = -0.086 , p < 0.001), and depressive status (estimate = -0.017 , p = 0.003). The mediating effects of social interaction (46.3% variances explained) and lifestyle (42.0% variances explained) were both larger than that of depressive status (8.3% variances explained).
CONCLUSIONS	The development of interventions aimed at improving social interaction, depression, and lifestyle could be of value to prevent cognition-related IADL disability.
CS3 3-5 Cs	aregiver Concerns Matter: the Roles of Health Ageing, and Healthcare, Related Worries in the Well-Reing

of Middle-Aged and Older Chinese Adults during COVID-19 Pandemic

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AIMS	Research suggests that Western family caregivers may be more likely to suffer from mental health problems, while Chinese family caregivers often benefit from their roles. Despite this, there have been few studies that have addressed the well-being of caregivers during COVID-19 and the underlying psychosocial mechanisms. This study aimed to investigate how ageing- and healthcare-related worries, as well as self-rated health, mediate the relationship between caregiving roles and psychological well-being.
METHODS	The sample consists of 1539 middle- and older-aged adults from the 2021 Chinese General Social Survey (CGSS). Bivariate and multivariate analyses were used to examine the associations between caregiving roles, and ageing- and healthcare-related worries, and health. Ordered logistic regression was used to examine the associations between caregiving roles, health, ageing- and healthcare-related worries and psychological distress. The Karlson-Holm-Breen (KHB) method was used to examine the mediation effects of health, ageing- and healthcare-related worries on psychological distress among caregivers.
RESULTS	Twenty percent of the sample provided care for family members. The results of regression analyses indicated that caregivers were 6.6% more likely to rate their health as fair or poor and 18.2% more likely to worry about access to healthcare, and were more worried about ageing ($\beta = 0.947$, $p < 0.001$) than non-caregivers. A positive association was found between the caregiving role and psychological distress (OR = 1.89, p <0.001), with self-rated health, concerns about ageing, and health services mediated by 27.06%. Female caregivers, particularly those 65 and older, were more likely than middle-aged men to suffer from psychological distress.
CONCLUSIONS	The pandemic may exacerbate psychological distress among family caregivers as they become more concerned about their health, family, and future lives. Family and ageing-related policies and services should focus on the physical and mental health of ageing caregivers and enhance their quality of life through psychosocial support.

Association between Discrimination and Its Impact on the Psychological Well-being of Older Men Who Have Sex with Men

12), Everyday Discrimination Scale (EDS), and the Perceived Acceptance Scale (PAS). Descriptive

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AIMS This study sought to examine the correlation between social acceptance and isolation, as well as discrimination, and their impact on the psychological well-being of older men who have sex with men (OMSM).
 METHODS A cross-sectional online survey was conducted to examine the influence of discrimination and social acceptance on the psychological well-being of OMSM in the People's Republic of China (PRC), Hong Kong, and Taiwan. A total of 450 participants aged 60 years and above were recruited for this study. The participants completed three validated self-report measures: the General Health Questionnaire-12 (GHO-

statistics, ANOVA, and regression analysis were employed to analyze the collected data.

- **RESULTS** The results from the various analyses revealed a significant correlation between discrimination, social acceptance, and the psychological well-being of OMSM. The mean score for the GHQ-12 indicated a moderate level of psychological distress among the participants, with a mean score of 6.38 (SD=2.55). The mean score for the EDS was 27.78 (SD=8.73), suggesting that participants faced instances of discrimination in their daily lives. Conversely, the mean score for the PAS was 3.08 (SD=0.48), indicating a moderate level of perceived social acceptance among the participants. These findings highlight the variations in levels of discrimination and social acceptance among OMSM across different regions of the PRC, Hong Kong, and Taiwan.
- **CONCLUSIONS** The study underscores the significance of discrimination and social acceptance in influencing the psychological well-being of OMSM. The findings indicate that interventions targeting the reduction of discrimination and the enhancement of social acceptance could potentially enhance the psychological well-being of OMSM. These results have substantial implications for healthcare providers and policymakers, emphasizing the need to develop strategies that foster social acceptance and mitigate discrimination towards OMSM.

CS3.4-1 Age-friendly City and Community: Policy Implications for Older Informal Workers in Indonesia

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- AIMS The objective of this research is to determine the approach for age-friendly cities and communities (AFCC) in Indonesia to promote productive ageing and ageing in place, specifically for older informal workers who are vulnerable and neglected.
- **METHODS** This research uses qualitative approaches, including data gathering through in-depth interviews with 42 informants, four focus group discussions, and observations with older informal workers in Surabaya and Yogyakarta. The reason why Yogyakarta and Surabaya City were chosen as the research setting is because these two cities are the capital cities (Yogyakarta is the capital city of the Special Region of Yogyakarta Province, and Surabaya is the capital city of East Java) and have the highest percentage of older people in Indonesia.
- **RESULTS** Based on the research findings, all older people who are informants do not know about the implementation of age-friendly city and community policies in their city. This study discovered that community and family can provide support for older informal workers. Ideally, in the future, older informal workers will receive assistance not only from the community but also from the local government.

CONCLUSIONS The conclusion of the study is that the local government must strengthen the implementation of age-friendly cities and communities in order to help older informal workers become more productive and age in place.

How does Social Support Interact with Intrinsic Capacity on Functional Ability Trajectories among Older Adults? Findings of a Population-Based Longitudinal Study

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AIMS	To examine how social support as an important social environment resource interacted with intrinsic
	capacity (IC) on functional ability (FA) trajectories among older adults.

- **METHODS** This was a prospective three-wave cohort study with a sample of 775 community-dwelling older adults. Social support, IC and FA were assessed using the Social Support Rating Scale, the revised integrated care for older people screening tool and the Lawton Instrumental Activities of Daily Living Scale, respectively. Latent growth curve models (LGCM) were implemented to test their relationships.
- **RESULTS** FA significantly declined over 3 years, and the detrimental effect of impaired IC on the deterioration rate of FA was buffered by subjective support but was aggravated by support utilization and was not changed by objective support. FA decline among older adults with impaired IC was observed in those with low subjective support or with high support utilization but not in those with high subjective support or with low support utilization. Among older adults with intact IC, FA decline was observed in those with low support utilization but not in those with high support utilization or with low or high subjective support.
- **CONCLUSIONS** Subjective support may prevent FA decline among older adults with impaired IC, while support utilization may benefit older adults with intact IC but endanger those with impaired IC. Social support interventions to optimize FA trajectories should improve their perception of support and bridge the gap of support utilization among older adults with impaired IC.
- **CONCLUSIONS** Interventions should be based the health status of grandparents, the intensity of intergenerational care, and family support. Quality of life for women involved in intergenerational caregiving should be improved through strengthening social security system, and developing family support services.

CS3.4-3

3 City-Healthy Ageing and Major Social Institutions: The Context in Thailand

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- AIMS This study aimed to 1) explore Healthy Ageing (HA) domains, validate the structures, 2) examine City-Healthy Ageing (CHA) using regression factor scores (RFS), and 3) investigate the relationship between CHA and major social institutions (family, temple, school) in Thailand.
- **METHODS** Using a sample of 41,752 older adults aged 60 and over from the 2017 survey of older persons in Thailand, 29 variables were created to assess HA and CHA. Data on major social institutions variables (temple and school) were obtained from the open government data of Thailand, while demographic and economic information for each city were derived from the population and economic census conducted by the Thai National Statistical Office in 2017.

Exploratory Factor Analysis (EFA) with varimax rotation was employed to explore the latent structures of HA. To develop and validate the model, Confirmatory Factor Analysis (CFA) with second-order CFA techniques was conducted. Regression factor scores were derived to measure HA and CHA. The relationship between CHA and social institutions was analyzed using multiple regression analysis, adjusting for demographic and socioeconomic factors of the cities.

RESULTS The final sample of 32,672 confirmed the HA model. EFA identified eight HA structures: Activity of daily living, functional ability, health deterioration, cognitive impairment, healthy behavior, community participation, unhealthy behavior, and subjective health and well-being. The 29 variables demonstrated adequate construct validity (KMO = .894, Bartlett's test, df=406, P < .001). Second-order CFA supported the HA model (CFI = .89, TLI = .88, RMSEA = .06).

CHA structures were significantly related to major social institutions. A higher number of schools and temples significantly related with better CHA in social connectedness domain.

CONCLUSIONS The study revealed the importance of social gathering places for older adults to engage in activities promoting CHA. Capacity building and improvements in these institutions are recommended for healthy ageing.

CS3.4-4 Ageing and Theory of Mind: Preliminary findings based on Young and Older Scenarios

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AIMS	Previous research has indicated that the decline in theory-of-mind (ToM) with age may be attributable to the use of traditional ToM measures that are more familiar or salient to younger individuals. These studies have typically compared the performance of younger and older adults on these measures to assess age-related changes in ToM abilities due to the normal aging process.
	This project aimed to create an age-appropriate ToM assessment tool to address this issue, and to examine whether there are age-related differences in ToM when both young and older scenarios are used. Specifically, the study tested the familiarity hypothesis, which suggests that people perform better on ToM tasks when they are presented with familiar scenarios.
METHODS	The study utilized 21 scenarios that were oriented towards younger or older adults, or were neutral in nature. As an initial validation of the newly developed ToM tool, we recruited 28 younger (age $M = 24.21$ years, $SD = 3.83$ years) and 32 older participants (age $M = 66.19$ years, $SD = 8.87$ years) who rated their familiarity and understanding of the emotions and thoughts of the characters in the scenarios.
RESULTS	Results indicate that age interacts with familiarity (partial $\eta^{2=.43}$), where older participants rated higher familiarity (M=5.07, SD=1.12) and understanding (M=5.42, SD=.88) scores for older-adult scenarios than young participants (familiarity: M=3.88, SD=.90; understanding: M=4.76, SD=.91). The study found no significant age group difference for young-adult scenarios, suggesting that both older and younger adults may have experienced similar situations in the past.
CONCLUSIONS	These findings support the need for a comprehensive ToM tool that is suitable for both young and older adults. Such a tool is now being developed by our team. The study will recruit both older and younger adults to participate in the ToM task.
CS3.4-5 Pro	ductive Engagement and Ageing Societies: Towards an Age-friendly City in Hong Kong <u>Padmore Adusei Amoaha¹, Ka Ho Mok¹, Zhouyi Wen²</u> ¹ Lingnan University, Hong Kong ² Our Hong Kong Foundation
AIMS	The quest to create age-friendly conditions and promote active ageing has become a priority for the Hong Kong Government and stakeholders in the city recently. Using a cross-national comparative framework for productive engagement in later life, this paper contributes to debates on ways to achieve such goals by examining the predictors of productive engagement (perceived voluntary engagement) in two districts (the Islands and Tsuen Wan) of Hong Kong.
METHODS	Data were collected through a cross-sectional social survey to ascertain the perception of an age- friendly city and active ageing in 2016 and 2018 from 1,638 persons aged 60 years and older.
RESULTS	The results indicate some differences in the perception of the key determinants in both districts, but the factors associated with productive engagement were consistent, namely social atmosphere, social provisions and the built environment.
CONCLUSIONS	The findings are discussed within the broader discourse on social gerontology, age-friendly cities and social policy.

CS3.5-1 Trans-disciplinary Collaboration on Primary Health Telecare in Rural Areas of Hong Kong

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- AIMS The project of "Telecare Services in Rural villages" demonstrates how the concept of trans-disciplinary collaboration can be applied in real life medical and social problem of providing primary health and social care service for rural villagers.
- **METHODS** The brand new and challenging real life problem as the project name mentioned created a context for the integration of medical care and social care, which facilitated the involvement of different stakeholders in working towards a common goal of solution. In the solution formulation process, different professions were aligned and various workflow as well as procedures were openly discussed. This kind of participatory mode of discussion and equal footing dialogue supported the trustful relationship among stakeholders. The maintenance, blurring, or dissolution of disciplinary boundaries occurred in the co-creation process. As a result, innovative ideas and solution were encourage, collected and fine-tuning.
- **RESULTS** In this project, the practice wisdom was distilled, reflected and identified. The key successful factors for the trans-disciplinary collaboration fall into the involvement of stakeholders with open-mindedness toward new perspectives and approaches, as well as common goals on dealing with challenging problems. This participatory mode of collaboration with the integration of the skills, perspectives, and expertise of different disciplines that can be coherent whole emerging from the efforts of each parties. New discoveries on solution formulation and a comprehensive model were build through the co-creating process.
- **CONCLUSIONS** Trans-disciplinary collaboration can be a new approach for facing the new and challenging problems in the age of uncertainty.

CS3.5-2

The Assessment Tool Development of the Organizational Health Literacy in Health Institutions from the Perspective of Elderly Patients

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- AIMS Studies on the organizational health literacy in health institutions may help increase patients' ability to cope with a disease and to navigate through the health institutions system are still rare. Especially tools to assess organizational health literacy in health institutions from the perspective of older patients are missing. This study aims to develop the assessment tool of organizational health literacy in health institutions for the perspective of organizational health literacy in health institutions for the perspective of organizational health literacy in health institutions for the perspective of organizational health literacy in health institutions in China.
- **METHODS** Based on the attributes of the organizational health literacy provided by Brach et al as the theoretical framework, combined with the characteristics of elderly patients, literature analysis and group discussion were used to develop the initial items of the tool for assessing the organizational health literacy in health institutions from the perspective of elderly patients. 12 experts using Delphi technique to determine the items of the tool.
- **RESULTS** Expert response was 91.7%, the authority coefficient rate was 0.89, the coefficients of variation of items were 0.08 to 0.28. The organizational health literacy in health institutions tool from the perspective of elderly patients consisted of 5 dimensions and 36 items. The 5 dimensions included patient participation, health information and services, navigation assistance system, interpersonal communications and policy norms.
- **CONCLUSIONS** The assessment tool of organizational health literacy in health institutions from the perspective of elderly patients developed by Delphi method is highly reliable. It can be served as an assessment tool to measure the organizational health literacy in health institutions in China.

CS3.5-3 Concept Validation of the Digitized Comprehensive Geriatric Assessment (CGA) in the Philippines

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AIMS	This study identifies the applicability and acceptability of digital version of the comprehensive geriatric assessment (CGA) and determines the frequency and importance of addressing the design challenges related to its administration.
METHODS	This concept validation forms part of University of the Philippines Manila Wellness Initiative for Seniors and Elders (UPMWISE) Project 3 Digitization of the CGA, an ethics-approved cross-sectional study which utilizes human centered approach in innovation. Design challenges and potential solutions mockups were developed based on the results of four focus group discussions with purposively sampled CGA assessors, program planners, and health facility administrator, online surveys with healthcare professionals (HCPs), (n=30) and older persons (OPs), (n=30), and two brainstorming sessions with the development team. Mockups were presented through Google survey form to collect feedback from potential end users. The importance, applicability, and frequency of design challenges were measured using Likert scale which were analyzed using STATA 17.0 while the qualitative results additional comments and suggestions relevant to the design challenges and potential solutions were analyzed using NVivo Pro Plus 12 analysis software by trained research assistants.
RESULTS	Out of the 30 target, 26 (87%) completed the concept validation with 15 HCPs and 11 OPs. Both follow up issues and sensitive questions (76.9%) related to the CGA administration are the most important challenge to be addressed. Follow up and recall issues were frequently faced by the HCPs while no design challenge was noted from OPs. Some proposed solutions included separate section for sensitive questions, text to speech function, and reading mode. The proposed solutions were favored by the HCPs and OPs; most of them preferred the combination of both solutions and features.
CONCLUSION	IS In designing the digitized version of the CGA, considering the results of the concept validation is crucial to enhance the user experience and ensure end users' uptake of the technology.

CS3.5-4

Towards Better Health in Ageing: Preliminary Findings on the Effectiveness of Tele-Exercise Programme for the Elderly at Risk of Falls

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- AIMS To evaluate the effectiveness of tele-exercise (TE) on the physical function of elderly at risk of falls in comparison with a community-based group (CB).
- **METHODS** A 3-month single-blind, randomized controlled trial (RCT) with assessment at baseline and after the intervention was performed. Participants were recruited from the elderly community centres in Hong Kong and attended exercise training 3 times per week for 3 months, either online (TE) or face-to-face (CB). The exercise training was based on Otago Exercise Programme. Outcome measures included the Chinese version of Fall Efficacy Scale-International (FES-I), 6-meter walk test, Time Up and Go Test, Berg Balance Scale and functional reach test.
- **RESULTS** A total of 17 participants were recruited, with a mean age of 79.56 ± 4.44 for CB and 77.50 ± 6.78 for TE (NS). The mean attendance rate was satisfactory for both groups, with CB at $93.52\pm6.34\%$ and TE at $87.50\%\pm10.65\%$ (NS). All outcomes showed improvement trends after the 3-month intervention. FES-I, Time Up and Go test, and Functional Reach test were significantly improved in CB at 3 months compared with its baseline. The 6-meter walk test, Time Up and Go Test, and Berg Balance Scale were significantly improved in TE at 3 months compared with its baseline. Participants in TE at 3 months significantly performed better than CB in the Time Up and Go Test.
- **CONCLUSIONS** Preliminary data suggests that both online and face-to-face exercise training can effectively improve physical function among elderly at risk of falls. CB participants improved their fall risk, mobility, and balance, while TE participants improved their gait speed, mobility, and balance. However, due to the small sample size, the results should be interpreted cautiously. Further research with a larger sample size is needed to confirm these findings and to understand better the potential benefits and limitations of tele-exercise for the elderly.

CS3.5-5 The Feasibility and Acceptability of an App-Based Perceptual-Encoding Training Program for Older Adults

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AIMS	The prevalence of mild cognitive impairment in older adults is increasing, leading to a greater demand for therapies that can maintain cognitive function and independence in daily life. To address this, we developed the Enhancing Memory in Daily Life (E-MinD Life) app-based program, which uses perceptual-encoding strategies. This study aimed to 1) ensure the appropriateness of E-MinD Life for older adults with and without mild cognitive impairment through an expert panel review; and 2) determine the feasibility and acceptability of the program with healthy older adults, providing insights for its potential application to individuals with mild cognitive impairment.
METHODS	In Phase One, twelve occupational therapists evaluated E-MinD Life, rating it on a Likert scale and providing feedback on feasibility, clarity, and relevance. Phase Two involved field-testing the nine-week program with nine healthy older adults who rated its acceptability using a Likert scale questionnaire. Feasibility was assessed through data on recruitment rates, retention, adherence, and session duration. Descriptive statistics analyzed Likert scale responses, while open-ended responses were qualitatively categorized using a constant comparative approach.
RESULTS	In Phase One, experts deemed the program feasible and identified relevant activities for community living in Phase One. However, the qualitative analysis suggested formatting changes in future iterations to enhance visual clarity, even though they believed older users with mild cognitive impairment could independently engage with the program. In Phase Two, all participants completed the nine-week program, attempting an average of 13.44 (SD=6.73) self-administered sessions out of the scheduled 18. Most participants found the program relevant, logical, easy to understand, and effective for addressing functional cognitive issues.
CONCLUSIONS	In conclusion, the E-MinD Life program shows promise for inclusion in trials investigating the effectiveness of cognitive strategy interventions for older individuals with and without cognitive impairment.

CS3.5-6

The Effectiveness and User Experience of a Computer-Based Training Programme on Everyday Activities for Older Adults: A Mixed Method Study

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- AIMS Older adults may experience cognitive deterioration, which impacts their independence in everyday activities. This study aims to examine the effectiveness and user experience of a computer-based cognitive training program called Enhancing Memory in Daily Life (E-MIND Life). The program uses memory-encoding strategies to enhance independence in everyday activities.
- **METHODS** Semantic and visual memory encoding strategies were incorporated into E-MinD Life, focusing on 12 everyday activities. A convenience sample of 20 cognitively healthy older adults was recruited from independent living communities. Participants completed nine therapist-guided sessions and 18 self-administered sessions of E-MinD Life over a nine-week period. Cognition was assessed using the Repeatable Battery for the Assessment of Neuropsychological Status before and after the program, while performance in everyday activities was evaluated using the Assessment of Motor and Process Skills. Indepth, semi-structured interviews were conducted to explore the experiences of older adults using E-MinD Life. The interviews were audio recorded and transcribed verbatim by professionals. Qualitative content analysis was applied to the interview transcripts to generate categories and sub-categories.
- **RESULTS** Quantitative results demonstrated improvements in memory, recall, visuospatial skills, and everyday activity performance after the nine-week program. Qualitative analysis revealed important categories, including the desire for therapeutic relationships and companionship, the need for cognitive stimulation in programs to avoid boredom and incorrect administration, and the challenge of transitioning memory strategies into day-to-day life.
- **CONCLUSIONS** The findings indicate that E-MinD Life was accepted and effective in maintaining cognition and performance in everyday activities among older adults. Computer-based interventions using memory strategies have the potential to complement therapist-led cognitive rehabilitation sessions.

CS4.1-1 A Nomogram Model for Predicting Frailty in Old People Based on the PBICR Database

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- AIMS Frailty is a major concern for individuals and their families, which may negatively affects the physical function and quality of life of old people. The aim of this study was to develop a validated risk prediction model for frailty in elderly and to help determine the timing of interventional treatment.
- **METHODS** The research used data from Psychology and Behavior Investigation of Chinese Residents (PBICR), a dataset representative of Chinese populationa dataset. The study cohort was randomly divided into a training set and a validation set at a ratio of 70 to 30%. The logistic regression model was applied to explore the associated factors of frailty in Chinese old people. A nomogram was constructed to develop the prediction model. Calibration curves were applied to evaluate the accuracy of the model. The area under the receiver operating characteristic curve and decision curve analysis were conducted to assess predictive performance.
- **RESULTS** 4056 people old than 60 from the PBICR database collected in 2022 were included in final analysis. A total of 1185 (29.21%) had frailty symptoms. Multivariate logistic regression analysis showed that age, depression, social support, the location of household registration, cataracts, debts and neighborhoods as predictors of frailty in people old than 60. These factors were used to construct the nomogram model, which showed good concordance and accuracy. The AUC values of the predictive model and the internal validation set were 0.746 (95%CI 0.726 ~0.765) and 0.711 (95% CI 0.681~0.741). Hosmer–Lemeshow test values were P=0.319 and P=0.212(both>0.05). Calibration curves showed significant agreement between the nomogram model and actual observations. ROC and DCA indicated that the nomogram had a good predictive performance.

CONCLUSIONS Comprehensive nomogram constructed in this study was a promising and convenient tool to evaluate the risk of frailty in Chinese old people, and contributed clinicians to screening the high-risk population.

Predictors of Progression from Subjective Cognitive Decline to Objective Cognitive Impairment: A Systematic Review and Meta-Analysis of Longitudinal Studies

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- AIMS The growing group of individuals are seeking medical help for purely subjective cognitive decline (SCD), and only individuals with certain characteristics experience clinical progression. We aimed to summarize the predictors of objective cognitive impairment in individuals with SCD and to identify those with a higher risk of clinical progression.
- **METHODS** We searched 11 electronic databases from inception to February 1, 2023, for longitudinal studies on factors associated with the clinical progression of SCD. Effect sizes were pooled using fixed-effects and random-effects models. Two objective cognitive impairment risk prediction models in the SCD population were developed by leveraging meta-analysis results.

RESULTS Forty-six cohort studies were included in the systematic review, of which 28 met the meta-analysis criteria. Fifteen predictors were identified, including 4 biomarkers (amyloid β deposition, lower Hulstaert Formula scores, apolipoprotein e4, and hippocampus atrophy), 4 epidemiological factors (older age at baseline, impaired instrumental activity of daily living, depressive symptom, and anxiety), and 7 neuropsychological factors (SCD in clinical settings, older age at onset, stable SCD, concerns, SCD confirmed by informant, severe symptoms of SCD, and poor performance on Trail Making Test B). We further developed two prediction models, one covering biomarkers (Model1), and the other comprising only demographic and behavioral indicators (Model2). Model1 could successfully identify individuals at low to high risk for clinical progression, whereas Model2 could only distinguish between low and moderate risk individuals.

CONCLUSIONS This study explored factors that influenced the clinical progression of SCD and developed models to predict incident mild cognitive impairment and dementia in the SCD population. These findings can facilitate the early identification of individuals at high risk of disease conversion in the SCD population and translate the evidence into clinical practice.

CS4.1-3

Effect of Frailty on the Short-Term Prognosis for Stroke Inpatients in China: A Multicenter, Prospective Cohort Study

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AIMS	To examine the effects of frailty on non-selective readmission and Major Adverse Cardiac and Cerebral Events (MACCE), and investigate its associations with cognitive impairment and post-stroke disability.
METHODS	A multicenter, prospective cohort study with a 3-month follow-up was conducted. A total of 667 adult stroke inpatients were in two tertiary hospitals in Changsha City and Urumqi City from July 2021 to June 2022. The Frailty scale was used to evaluate frailty status. Non-selective readmission and MACCE were evaluated as primary outcomes; cognitive function measured by the Mini-Mental State Examination Scale (MMSE) and post-stroke disability measured by the Modified Rankin Scale (mRS) were secondary outcomes at follow-ups. Cox regression analysis and generalized linear model were performed to examine differences in outcomes by frailty.
RESULTS	The prevalence of frail and non-frail participants was 32.2% and 67.8% among stroke inpatients. Among them, 0.8% of patients died, 2.0% had MACCE and 9.5% had non-selective readmission. Frailty status was an independent risk factor for non-selective readmission (HR 2.46, 95.0% CI: 1.43 to 4.23) and MACCE (HR 3.77, 95.0% CI: 1.07 to 13.22) for stroke inpatients. The frail group had lower odds of better cognitive function (OR 0.34, 95.0% CI: 0.12 to 0.97) adjusting for age, educational level, follow-up interval (days), and baseline MMSE. It was also more likely to have a post-stroke disability (OR 1.72, 95.0% CI: 1.14 to 2.60) adjusting for age, gender, follow-up interval, and baseline mRS.
CONCLUSIONS	Frailty was common among stroke inpatients in China. Frailty status was an independent risk predictor of readmission and MACCE; it was also correlated with cognition impairment and post-stroke disability among stroke inpatients. Frailty is an important marker for the short-time prognosis of stroke inpatients, which suggests evaluation and intervention of frailty to reduce adverse outcomes.

CS4.1-4 The Current Situation and Influential Factors of Frailty in Hospitalized Elderly Patients with Diabetes

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AIMS	To investigate the situation of frailty and its influential factors among elderly hospitalized patients with diabetes so as to provide evidence for effective clinical intervention.
METHODS	A convenience sampling survey was conducted among elderly diabetes patients in geriatrics and endocrinology departments of a Tertiary hospital in Changsha, from February to June 2023. The investigative tools included a self-made general information questionnaire, the Chinese version of the FRAIL scale, the short form of the Geriatric Depression Scale (GDS-15), the Social Support Scale (SSS), and the Mini Nutritional Assessment-Short Form (MNA-SF). EpiData 3.1 software was used for data input and SPSS 23.0 software package was used for data analysis. The main statistical methods were descriptive analysis, T test, ANOVA, Pearson correlation analysis, multiple linear regression analysis, etc.
RESULTS	Totally 154 valid questionnaires were collected. A total of 43 (27.9%) elderly inpatients with diabetes suffered from frailty, and 77(50%) had pre-frailty. The mean score of total frailty was (1.683 \pm 1.367). Regarding the nutritional status, the mean score was (11.163 \pm 1.946), with 55 participants being at risk of malnutrition (53%), and 4 participants having malnutrition (4%). The mean score of depression was (4.635 \pm 2.264). The total score of social support level ranged from 20 to 48, with an average of (34.40 \pm 6.56). Multiple linear regression showed that age, the frequency of hypoglycemia occurrence within the past six months, and nutritional status were the major influential factors of frailty (P<0.05).
CONCLUSIONS	The prevalence of frailty in elderly inpatients with diabetes was at a high level, and its main influential factors were age, nutritional status, and the frequency of hypoglycemia. Medical staff should attach great importance to screen and identify of frailty among elderly inpatients with diabetes, take targeted and holistic interventions timely to prevent or delay the development of frailty.
CS4.2-1 Know	ledge towards Frailty of Older People among Nurses in Macao
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AIMS	To investigate the knowledge towards frailty of older people and related factors among nurses in Macao.
METHODS	A quantitative descriptive study with a cross-sectional design was used. All Macao nurses were included and invited into this study. Based on the literature review, the measurement included the demographic background and developed older people frailty knowledge scale. The CVI (the index of content validity) of measurement was 0.97, while the reliability for Cronbach's Alpha was 0.871. The data collection used electronic questionnaire survey through surveycake. SPSS 26.0 software was used for statistical analysis.
RESULTS	Total 353 Macao nurses were included in this study. Most participants were female (n=345, 97.7%) and the mean age was 32.85 (SD=7.17), the mean score of older people frailty knowledge scale was 71.08 (SD=9.96) compared to the full score 100 points. Predictors of associated factors of geriatric frailty included gender, working years, having good experience with older people and planning to live with older people in the future (p<0.05).
CONCLUSIONS	Macao nurses' knowledge to frailty of older people has higher average scores. The geriatric frailty preventive measures were the highest average scores, while the assessment of geriatric frailty were the lowest average scores. It is suggested that education related to frailty of older people can be provided through lectures, on-line course and clinical practice. The knowledge to frailty of older people should be promoted not only in nurses but also in healthcare workers and publicity.

CS4.2-2	Intergenerational Relationships and Older Filipinos' Quality of Life
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AIMS	Intergenerational relationship is consequential to the quality of life of older persons. The study aimed to determine the association of intergenerational social and economic relationships with the quality of life of older Filipinos.
METHODS	Data for this study were obtained from the Focused Interventions for Frail Older Adults Research and Development Program, a cross-sectional study of randomly sampled community-living older persons, aged 60 years and older. Sociodemographic factors and active engagement in intergenerational social, financial, and daily activities were obtained through interviews. Quality of life was measured using the WHO quality of life - BREF in Filipino. Chi square tests and independent samples t-tests were used for comparison.
RESULTS	There were 405 participants enrolled in the study, 64.4% were women, and the median (IQR) age of 68 (64- 75). About 95.8% lived with others, 63.8% of which were with their nuclear family. Financial support was given to 77.3%, 85.9% of which came from their children. There were 33.8% who served as caregivers, mostly to their grandchildren (70.1%). The mean score for the physical domain was 62.8 (\pm 16.9), psychological domain, 64.0 (\pm 16.3), social domain, 68.6 (\pm 16.5), and environmental domain, 60.3 (\pm 15.9). All four domains were significantly higher among OP who performed household tasks but were significantly lower among those who were being cared for by their family. Chi square tests and independent samples t- tests were used for comparison.
CONCLUSION	S Being able to perform household tasks emerged as a determinant of good quality of life in this sample of community-living older persons. It is recommended that future investigations find ways on how to foster a sense of purpose and meaning in older persons.
CS4.2-3	Multiple Realities among Older Persons at Home Amid COVID-19 Pandemic at the Lens of the Youth: A SWOT Analysis and Back Casting Perspectives
¹ Min	Neil Madulara MARTIN ¹ & Vincent Go TABIL ¹ danao State University Iligan Institute of Technology, College of Health Sciences, Mindanao, Philippines
AIMS	This paper delved into the exploration of the multiple realities among older persons at home amid the COVID-19 pandemic; SWOT analysis and back-casting perspectives among the youth in an online platform.
METHODS	Narrative inquiry qualitative design, SWOT Analysis, and Back-casting in an online platform among the youth participants were employed following strict ethical protocol in the university.
RESULTS	Multiple realities reported were the death of a spouse, the impact of omicron, the use of herbal medicines, polypharmacy, challenging attitude, and behavior. SWOT analysis conveyed, S: An existing program spearheaded by the College of Health Sciences of a Higher Education Institution covered approximately 44 Barangays with respective Senior Citizens Association for the past years even during pre-covid 19 pandemic periods. W: Financial constraints and manpower needs. O: Growing numbers of senior citizens using the Internet and participating in social media. T: Face-to-face interaction is prohibited while posing high risks to the physiological, psychosocial, and mental health of older persons at home.
CONCLUSION	S Envisaging the alternative future ahead with path-forward mechanisms in sustaining the care for older persons in the city is imperative. A multi-disciplinary and multi-agency communication, cooperation, and collaboration where Higher Education Institution takes the lead as the Center for Ageing in the region is pivotal to sustaining interoperability of the care of the older persons within the region.

CS4.2-4

Childhood Stress, Loneliness, and Cardiovascular Diseases of Ageing Adults in Hong Kong: The Buffering Role of Family Support and Friend Support

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AIMS	Emerging evidence shows that stressful events in childhood are predictive of cardiovascular diseases (CVD) in later adulthood. This study aims to identify to what extent childhood stress predicted CVD, and whether loneliness linked chronic stress in early life to CVD in old age. It also examines the roles of different sources of social support in buffering the negative impacts of childhood stress on cardiovascular health.
METHODS	This study used data from the Panel Study of Ageing and Society in Hong Kong, including 5,007 participants aged 50 years and older. Childhood stress was assessed by the sum of eight chronic stressors regarding health threats, financial strain, and interpersonal loss and trauma. A moderated mediation model was used to examine the relationships in this study.
RESULTS	Childhood stress was significantly associated with an increased likelihood of CVD among ageing adults (OR = 1.25 , p < 0.001 , 95% CI [1.13 , 1.39]), adjusting for a set of control variables. Childhood stress was positively related to loneliness, which in turn increased the risk of CVD. Support from friends, instead of family, buffered the adverse impacts of childhood stress on loneliness, thus reducing the risk of suffering CVD in old age.
CONCLUSIONS	This study revealed how chronic stress in childhood directly and indirectly predicted the incidence of CVD in older adults via loneliness. The importance of friendship support in buffering the negative effects of childhood stress on loneliness and CVD was highlighted in this study.
	Relationship between Dementia Literacy, Acculturation, Social Network and Intention to Seek Help: A Cross-Sectional Study

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AIMS	This study examines the relationship among dementia literacy, acculturation, social network, and intention to seek help for dementia among Africans in Hong Kong.
METHODS	A cross-sectional study with Africans 18 years and above living in Hong Kong. Convenient and snowball sampling was used to recruit Africans from October to December 2021. Survey items included the dementia literacy scale (assess dementia literacy), the general help-seeking questionnaire (Intention to seek help) and Lubben Social Network Scale (LSNS-6) (social network). Descriptive statistics, spearman correlation analyses and structural equation models were conducted.
RESULTS	Four hundred and sixty-one Africans participated in the study, with a mean age of 33.5. More than half held working or student visas (60.7%), with an average stay of 6.6 years (SD=5.42). A vast majority (90%) of participants intended to seek help for dementia from health professionals. Social network ($\beta = 0.09$, p=0.021), assimilation strategy in acculturation ($\beta = 0.16$, p<0.001), and dementia literacy subscale (knowledge of how to access dementia information) ($\beta = -0.16$, p<0.001) were significantly associated with intention to seek help (RMSEA=0.001; NFI= 0.99; TLI=1.00; CFI=1.00; X ² /df=0.723; P=0.395; df=1). Knowledge of how to access information partially mediated the relationships between social networks and intention to help-seeking and between acculturation and intention to help-seeking.
CONCLUSIONS	Africans' intention to seek help for dementia is primarily influenced by social context (social network and assimilation strategy) and access to information. Interventions to promote early dementia help-seeking among African migrants should address the complex interplay among dementia literacy, acculturation, social network, and intention to seek help for dementia. Efforts should be made to train Africans to access dementia information in their new society.

CS4.3-1	Status and Influencing Factors of Social Isolation in Rural Elderly Patients with Sarcopenia in Henan Province
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AIMS	To investigate the status and influencing factors of social isolation in rural elderly patients with sarcopenia in Henan province, so as to provide reference for formulating social isolation intervention measures for elderly patients with sarcopenia.
METHODS	From May to June 2023, a cross-sectional survey was conducted among 236 elderly patients with sarcopenia in 4 villages of Baizhai Town, Zhengzhou City, Henan Province, using convenience sampling method, general information questionnaire, Lubben Social Network Scale 6,Short Physical Performance Battery, Modified Fatigue Impact Scale, Chinese version of the Life Space Assessment and Hamilton Depression Scale. Binary Logistic regression was used to analyze the influencing factors of social isolation in senile patients with sarcopenia.
RESULTS	The social isolation score of 236 elderly patients with sarcopenia was (11.43 ± 4.30) , the family isolation score was (6.42 ± 2.34) , and the friend isolation score was (4.99 ± 2.60) . The incidence of social isolation, family isolation and friend isolation were $37.3\%, 30.5\%$ and 37.7% , respectively. Logistic regression analysis showed that age, sex, living style, sleep status, number of children, depression, fatigue, living space level and physical function were the influencing factors of social isolation in elderly patients with sarcopenia (P<0.05).
CONCLUSIONS	The incidence of social isolation in elderly patients with sarcopenia is high, and there are many influencing factors. Medical staff should pay attention to the problem of social isolation in elderly patients with sarcopenia, and formulate intervention measures according to its influencing factors, so as to improve the current situation of social isolation in elderly patients with sarcopenia and delay the development of sarcopenia.
CS4.3-2	The Multi-Trajectory of Social Reserve and Longitudinal Association with Functional Disability in Community-Dwelling Older Adults with Cognitive Impairment
² WHO Colld	Yaqi HUANG ^{1,2} & Angela Y.M. LEUNG ^{1,2} ¹ School of Nursing, The Hong Kong Polytechnic University, Hong Kong SAR, China aborating Centre for Community Health Services, School of Nursing, The Hong Kong Polytechnic University, Hong Kong SAR, China
AIMS	To identify the trajectory of social reserve among community-dwelling older adults with cognitive impairment and explore the relationship between the social reserve trajectory and functional disability.
METHODS	We included 805 community-dwelling older adults with cognitive impairment in 2008 at baseline and 2014/2018 follow-up surveys of the Chinese Longitudinal Healthy Longevity Survey (CLHLS). The social reserve was calculated from measured social networks, social engagement, social support, and social connectedness. Functional disability was determined from the measured basic activity of daily living (BADL) and instrumental activity of daily living (IADL), respectively. Group-based multi-trajectory modeling (GBTM) was conducted to determine the trajectory of the social reserve. Generalized Estimating Equation (GEE) was utilized to explore the relationship between social reserve trajectories and functional disability.
RESULTS	Five trajectories of the social reserve were identified. The trajectory groups from one to five were labeled as "generally weak" (10.69%), "deficient network and connectedness" (27.0%), "vulnerable support and connectedness" (43.27%), and "network-connectedness polarized" (19.07%). After controlling the covariates, basic functional disability showed no significant difference between any two groups in each wave except group 3 and group 4 in 2018 (Mean Difference =0.53, p=0.016). In terms of instrumental functional disability, group 1 (Mean Difference =0.298, p<0.001; Mean Difference =2.53, p<0.001, respectively) and group 2 (Mean Difference =0.78, p=0.020; Mean Difference =1.57, p<0.001, respectively) were significantly higher than group 3 and group 4 at baseline. Group 4 demonstrated the lowest level of instrumental functional disability among all groups. However, in 2011 and 2014, the score dramatically increased, making it the highest among all groups in subsequent years.

CONCLUSIONS The trajectories of the social reserve were identified in our study. The trajectories of social reserve were closely associated with the instrumental functional disability while this association with basic functional disability still needs to be further proved.

CS4.3-3 Thriving in Golden Years: Promoting Psychological Well-being for Healthy Ageing in India

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AIMS	In order to address the issues associated with an ageing and implement effective policies, countries must have a thorough understanding of health issues and emerging trends among the geriatric population. Healthy ageing is an essential strategy to address the issue among the elderly. Psychological well-being is a critical factor that contributes to healthy ageing, yet it is often overlooked. Therefore, present study examines the relationship between psychological well-being and healthy ageing among older adults in India aged 60 years and above.
METHODS	We conceptualized healthy ageing within the WHO functional ability framework and created composite score of Healthy Ageing Index (HAI) using PCA based on LASI (wave-1) data 2017–18. We then used multiple linear regression to demonstrate the association between psychological well-being and HAI.
RESULTS	Psychological well-being is significantly associated with healthy ageing among older adults in India (β =1.56; 95% CI: 1.35-1.76). Older adults who reported higher levels of psychological well-being had better physical health outcomes, including lower rates of chronic diseases and lower levels of functional disability (ADL/IADL).
CONCLUSIONS	Overall, our study highlights the importance of promoting psychological wellbeing and healthier lifestyle for better health outcome among the older population in India. It also highlights the socio-demographic inequalities in healthy ageing. Apart from that, focus should be given on encouraging the healthier lifestyle and psychosocial well-being at the population-level as well as individual-level to promote healthy ageing society.
CS4.3-4 Ritua	l and Healthy Ageing: Learning from a Fifteenth-Century Chinese King
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AIMS	 To briefly explore the role of ritual in modern society. To explain health and ageing as culturally constructed categories. To make the bridge between the scientific community and the Humanities. To dispel misunderstandings about ritual. To explore the potential of ritual as it relates to healthy ageing.
METHODS	 Ritual theory History Philology
RESULTS	The talk sheds new light on:1. Chinese concepts of longevity.2. Why Ming China (1368-1644) matters for contemporary audiences.3. Why ritual matters for ageing.4. How to engage ritual with a view to improving ageing.
CONCLUSIONS	 Ritual remains extremely relevant for modern societies. Rituals can play a formidable role in healthy ageing. Healthcare institutions should create more awareness towards the humanizing benefits of rituals. We have to develop a creative relationship with ritual.

CS4.3-5	Association of Spouses' Sensory Loss with Depressive Symptoms, Self-Reported Health, and Functional Disability among Middle-Aged and Older Adults in China: A Cross-Sectional Study
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AIMS	To investigate cross-sectional associations between spouses' sensory loss and depressive symptoms, self- rated health, and functional disability.
METHODS	We included 10,410 individuals (mean age 61 years for husbands and 59 years for wives) from the 2018 China Health and Retirement Longitudinal Study wave. We used the cross-sectional design and determined hearing loss, vision loss, and dual sensory loss by self-reports. We assessed depressive symptoms using the Center for Epidemiological Studies Depression Scale. We assessed self-report health status using one item. Functional disability was defined as having difficulties in activities of daily living (ADL) and instrumental activities of daily living (IADL).
RESULTS	Individuals with spouses' dual sensory loss had a higher prevalence of depressive symptoms (45.19%), ADL (17.31%), and IADL impairments (21.97%) and a lower rate of self-rated good health (20.78%) than those with no or single loss. The spouse's sensory loss was associated with depressive symptoms, self-rated health, ADL, and IADL impairments(P<0.05). The association between spousal hearing loss and depressive symptoms and between spousal sensory loss and self-rated health were similar among couples (P<0.05).
CONCLUSIONS	This study revealed that spouses' sensory loss was related to depressive symptoms, self-rated health, ADL, and IADL impairments, and there was no sex specificity in depressive symptoms and self-rated health.
CS4.3-6	How to Promote Resilience and Well-Being for Older Adults in Thailand
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AIMS	To study the Resilience Quotient of the older adults who came to receive services at the outpatient department, in the hospital in Bangkok and Chonburi province.
METHODS	Study design: Survey research in the elderly aged 60 years and over who received services at the outpatient department in 2020-2021. Participant: Purposive sampling 235 participants. Cronbach Alpha Coefficient of Resilience Quotient Assessment Form for Thai Elderly was 0.83, then analyzed by descriptive statistics.
RESULTS	The results of the study were mainly female (85% , 58%), the early elderly of $60 - 69$ years old (62% , 51%) marital status (49% , 62.0%). Most of the elderly perceived themselves as healthy (53.0% , 50.0%). Most of them had underlying diseases (70.5% , 84.0%), and all had sufficient income to carry on their lives (90.0%). Most of them experienced adversity (63.0% , 79.0%). Their total resilience is at the high level (57.5% , 58.0%) followed by the highest level (42.5% , 40.0%). Their mental strength was found at the highest score (51.0% , 53.0%), followed by four aspects: problem-solving (68.5% , 66.0%), religious and believed (57.5% , 63.0%), social support, interrelation (55.0% , 60.0%), in consecutively, at the high score.
CONCLUSIONS	The results showed that early elderly people viewed themselves as healthy and highly resilient. According to the literature found that ways to promote resilience in the elderly include promoting mental and emotional stability, coping and problem solving skills, social support and promoting good health behaviors. A high level of association was found between resilience and well-being. Promoting increased resilience in the elderly will enhance happiness and value quality of life.

Eme	ects of a Combination Therapy of Music-based Movement, Neuromodulation, Cognitive Training, and otion Regulation on Cognition, Physical and Mental Fitness in Community Older Adults: A Three-Arm idomized Controlled Trial
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AIMS	To assess the effectiveness of combination therapy of music-based movement, neuromodulation, cognitive training, and emotion regulation (MNCE) on cognitive, physical, and mental fitness in community older adults.
METHODS	A single-center, three-arm, randomized trial was conducted with 175 older adults (mean age = 69.19 ± 6.47 years) recruited from the community. Participants were randomly assigned to a 12-week (2x/week, 35min/session) combination therapy (MNCE), cognitive training (CT), or control group (CG). MNCE program consists of 10 minutes of music-based movements, 15 minutes of transcranial direct current stimulation (tDCS) synchronous cognitive training, and 10 minutes of cognitive behavioral therapy-based emotion regulation. Cognitive functioning, physical and mental fitness were evaluated at baseline and post-training.
RESULTS	As of June 11, 2023, 63 participants have completed the study (this study is still ongoing and expects to complete in September 2023). Comparing two interventions with the control, a significant increase in verbal memory (F=6.76, p<0.01), One-back task accuracy (F=9.39, p<0.01), and 3-level version of the EuroQol Five Dimensions Questionnaire (EQ-5D-3L) self-rated score (F=18.53, p<0.01), was observed in the MNCE and CT. Participants in MNCE and CT had a significant reduction in One-back task time (F=14.77, p<0.01), EQ-5D-3L score (F=6.05, p<0.01), and Geriatric Depression Scale (GDS) (F=5.55, p<0.01). The time of the 6-meter walking test and Five Times Sit to Stand Test (FTSST) decreased significantly specific to the MNCE group (F=3.98, p=0.02; F=4.60, p=0.01)
CONCLUSIONS	Results suggest that both MNCE and CT may have a positive impact on memory, attention, quality of life, and depression in older adults. The MNCE also helped to improve participants' physical functioning, especially mobility and lower limb muscle strength. The sustained effects remain to be determined by the continuation of this study over the next three months. This study could serve as a model for designing future RCTs with combined non-pharmacological treatment interventions
CS4.4-2 Bur	den and Depression among Elderly Caregivers of Patients with Schizophrenia
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AIMS	To assess the level of burden and depression among elderly care givers of schizophrenia and its relationship with severity of illness and socio-demographic variables.
METHODS	The study sample included 105 patients with a diagnosis of schizophrenia and their elderly caregivers, using non-probability, convenient sampling from Mental Health Centre, Vellore, India as per inclusion and exclusion criteria. Zarit Burden Interview and Geriatric Depression scale were used for the study.
RESULTS	72% of them showed moderate to severe burden and 46% of them showed moderate to severe Depression. There was strong positive co-relation between burden and depression ($r=0.534$) ($p=<0.001$). There is a moderate correlation severity of illness with burden ($r=0.270$), ($p=0.002$) and also with Depression ($r=0.303$),($p=0.002$).
CONCLUSIONS	These results care be used to plan interventions to reduce caregiver stressors especially older caregivers. Mental Health services must be directed to caregiver as well as patients of schizophrenia.

Family Caregivers' Perceptions and Experiences of Supporting Older People with Multimorbidity on Coping with Loneliness: A Qualitative Study

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AIMS	This study aims to understand family caregivers' perceptions and experiences in supporting older people with multimorbidity to cope with loneliness in the community.
METHODS	We conducted semi-structured interviews, individually, with family caregivers of older people with multimorbidity. Family caregivers who have past experiences or are caring for at least one home-dwelling older person with multimorbidity in Hong Kong were invited to an in-depth interview. Purposive sampling was used to recruit participants who fulfil the inclusion criteria based on their willingness. Ethical approval was granted by the Institution Review Board of the Hong Kong Polytechnic University (HSEARS20221219003).
RESULTS	All of the family caregivers have identified and reported experiences of loneliness and social isolation of older adults. Within a relationship between older adult and spouse family caregiver, lost in health and independency, uncertainty and expectations on intimacy relationship with the family caregiver, made older adult feel more lonely. Most family caregivers of older adults with cognitive intact reported their ways of increasing companionships, and conversations with older adults and some of them arranged social activities for older adults, such as talking to a friend over the phone. However, family caregivers of persons with dementia expressed their challenges in addressing older adults' loneliness and other psychosocial problems due to a lack of interactive communication and mutual understanding. Training on how to communicate with persons with cognitive impairments was asked by family caregivers. Moreover, how to encourage older adults to access existing community-based services was raised as a big challenge for family caregivers, which needs to be considered and supported by nurses.
CONCLUSIONS	Our study builds on current knowledge by supplementing empirical findings for healthcare providers to understand and address loneliness of older adults with multimorbidity, and inform nurses to initiate multidisciplinary cooperation and adapt appropriate interventions in response to caregivers' specific needs

to optimize their caregiving experience.

CS4.4-4

Using Co-Design to Optimise Perioperative Nursing Care for Older Adult Patients from Ethnically Diverse Backgrounds: A Tailored Experience Based Co-Design Methodology

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- AIMS To present an overview of the co-design methodological approach used to optimise perioperative care experiences for ethnically diverse older adults and their family carers.
- **METHODS** An Experience Based Co-Design (EBCD) approach has been conducted over three phases to address the research aims and questions. Throughout these phases, a Core Advisory Group of key informants who represented the key concept areas of this research were engaged. This group included health consumers. The sustained engagement allowed for a consensus to be reached on the issues experienced by, and unique needs of, the represented health consumer groups. During Phase 1, the Core Advisory Group was formed, and a literature review was conducted which informed subsequent phases of this research. Phase 2 involved a qualitative survey on perioperative experiences of patients and family carers. Patient and their family carer semi-structured interviews were then held, as well as perioperative staff semi-structured interviews. Phase 3 involved a co-design workshop with patients, family carers, perioperative staff and key stakeholders. During this workshop, potential practice changes were co-designed, and proposed for clinical implementation.
- **RESULTS** Experience Based Co-Design allowed for health consumer voices to be highlighted and shared with key stakeholders, including perioperative staff. Furthermore, the co-design workshop was an opportunity to illuminate any dissonance between what researchers and perioperative staff perceived as the highest priority intervention aimed at optimising perioperative care, and what health consumer attendees actually wanted. The co-design workshop highlighted the importance of health consumer voices, particularly in understudied population groups. Despite recruitment and data collection strategies involving ways to minimise well-established barriers to research participation by ethnically diverse health consumers, there were unexpected complexities experienced with engagement of health consumer representatives from ethnically diverse backgrounds.
- **CONCLUSIONS** Use of an Experience Based Co-Design methodology has helped to determine how the use of a co-design approach may impact the development of culturally responsive perioperative nursing care for those from ethnically diverse communities.

CS4.4-5 Preliminary Findings from a Scoping Review of the Benefits of Mahjong Playing in Older Adults

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AIMS	Mahjong playing, a well-known intellectual and social leisure activity in China and some Asian societies, is considered beneficial to cognitive and psychological functioning in older adults. However, clear conclusions on the relationships between mahjong playing, and cognitive, psychological and functional outcomes cannot be reached. The current review aimed to review this emerging literature, and highlight the gaps and opportunities for future research.	
METHODS	Systematic searches were conducted on 15 Chinese and English databases. Thirty-nine studies were identified and included in this review. Data were charted on study aims, designs, populations, measures, and findings by two reviewers independently.	
RESULTS	This review included 33 observational and 6 intervention studies. They were mainly conducted in Chinese societies (viz., China, Hong Kong, and Taiwan), and focused on correlational studies, cognitive outcomes and clinical populations. Preliminary findings from observational studies supported the association between mahjong playing with better cognitive, psychological and functional abilities. Intervention studies also showed the preliminary effectiveness of mahjong playing on general cognitive abilities, short-term memory, and depressive symptoms. A paucity of research, however, was found in the area of psychological and functional outcomes. More future research is recommended to understand the mechanism of mahjong playing, examine the effects of mahjong playing on higher-level cognitive functioning, ascertain the generalizability of the effects, and explore the effects on healthy older populations.	
CONCLUSIONS	Preliminary evidence revealed that mahjong playing was beneficial to cognitive, psychological and functional functioning in older adults. It suggested mahjong playing is a potential strategy for promoting healthy ageing. More evidence-based research is warranted to support its theoretical and practical values.	
CS4.4-6 Plass	ma BDNF/Irisin Ratio Associates with Cognitive Function in Older People	
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AIMS	To examine whether plasma biomarkers of brain-derived neurotrophic factor (BDNF), irisin, clusterin and BDNF/irisin ratio could differentiate people with mild cognitive impairment (MCI) from cognitively normal individuals, and to explore their relations with cognitive performance.	
METHODS	We included 124 participants with MCI and 126 participants with normal cognition from a community- based aged and cognitive health cohort. Plasma BDNF, irisin and clusterin were measured, and BDNF/irisin ratios were calculated. Global cognition was evaluated with Montreal Cognitive Assessment. T-tests, logistic regressions, and linear regressions were used to explore the relations between plasma biomarkers and cognitive function.	
RESULTS	The plasma levels of irisin, but not BDNF, was significantly different between participants with MCI and cognitively normal participants. Higher irisin concentration was associated with increased probability for MCI (OR: 1.06, $p = 0.004$) after adjusting for covariates. By contrast, plasma BDNF levels, but not irisin, were linearly correlated with cognitive performance ($\beta = 0.14$, $p = 0.033$). Plasma BDNF/irisin ratios were positively correlated with cognitive performance ($\beta = 0.14$, $p = 0.036$), and significant differences on BDNF/irisin ratios existed between MCI group and cognitively normal group. The risk for MCI decreased by 53% (OR=0.47, $p = 0.043$) with each unit increase in BDNF/irisin ratios after adjusting for covariates. Plasma BDNF and irisin concentrations increased with aging, whereas BDNF/irisin ratios remained stable across all ages. No significant results of clusterin were observed in the above analyses.	
CONCLUSIONS	Plasma BDNF/irisin ratio is a potentially reliable indicator which not only reflects the odds of the presence of MCI but also directly associates with cognitive performance in older people.	

CS4.5-1

Barriers and Facilitators to Implement eMental-Health Intervention Among Older Adults: A Qualitative Systematic Review

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AIMS	Implementing electronic mental health interventions (EMHIs) is effective but not well used and promoted currently among older adults. This study sought to systematically review and summarize the barriers and facilitators of implementing EMHIs among older adults.
METHODS	We comprehensively retrieved six electronic databases from January 2012 to September 2022: PubMed, Web of Science, Embase, Scopus, PsycINFO, and CINAHL. All English literatures on qualitative and mixed-method studies include qualitative data were included. Eligible studies underwent data coding and synthesis aligned to the Consolidated Framework for Implementation Research 2.0.
RESULTS	The systematic review screened 4,309 articles, 19 of which were included (9 with mixed methods and 10 with qualitative methods). The following CFIR 2.0 constructs were relevant to barriers and facilitators: 1) innovation: technology design, EMHIs design, types of EMHIs, relative advantages, security, and privacy; 2) outer setting: community engagement and partnerships, local conditions, and financing; 3) inner setting: leadership engagement, available resources, communications, access to knowledge and information, incompatibility, and intergenerational support; 4) individuals: perceptions, capability, and motivation of stakeholders; and 5) implementation process: team and integration.
CONCLUSIONS	These findings are critical to optimizing and expanding EMHIs among older adults, and the systematic review provides a reference for better evidence-based implementation strategies in the future.
	ring for the Caregiver: Piloting a Comprehensive Needs Assessment Tool for Caregivers in Singapore - A actitioner's Perspective
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AIMS	 To better support caregivers of older persons in the community, a dedicated and comprehensive needs assessment tool, the Self-Report of Carer Needs (SCaN), was piloted in Singapore. Developed by interRAI, an international collaborative network of researchers, SCaN focuses on gathering the caregiver's perspective on their health, mood, motivations and commitments, caregiving-related knowledge and resources, and in turn helps to identify areas of challenges faced by the caregivers. The aims of this pilot study are: To investigate the feasibility of applying InterRAI SCaN assessment in Singapore To gain insights into the use of the instrument for person-centred care planning for the caregiver
METHODS	Singapore's Agency for Integrated Care supported recruitment of 7 community service providers to be trained on the administration and use of SCaN. The assessment tool was hosted on digital survey platform and 80 caregivers successfully completed the survey. Upon survey completion, a set of Care Foci were triggered by an in-built algorithm, covering bio-psychosocial health and caregiving-related resources of each respondent caregiver. Individual reports of responses and care foci for each caregiver were sent to respective service providers to become basis for customized care plan development. An online meeting was conducted with the service providers to obtain feedback on the use of the instrument.
RESULTS	 The comprehensiveness and sensitivity of SCaN highlights areas of unmet needs that care providers may otherwise overlook. Care foci triggered by SCaN should serve as a conversation starter to better understand caregivers' perspectives of their own needs The instrument can be lengthy, especially for caregivers who are not able to use the online platform. Training on the administration and use of the tool for purposes of care plan development is crucial
CONCLUSIONS	As a person-centred assessment for caregivers covering self-care and caregiving needs, SCaN is a valuable tool for both practitioners and policymakers.

CS4.5-3	Gerontech: A Key to Enabling Healthy Ageing in Hong Kong
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AIMS	In collaboration with the Gerontechnology Platform and its intermediary, the Hong Kong Council of Social Service, this report aims to reconsider and re-formulate our holistic analysis of Hong Kong's gerontech ecosystem.
METHODS	A mixed method approach was adopted. For the first part of the report, a survey was conducted with relevant stakeholders to gather feedback on the development of the gerontech ecosystem based on the 24 gaps identified in the first gerontech landscape report published by Our Hong Kong Foundation in 2017. The second part of our report was supported by literature review and stakeholder interviews, and also informed by the survey results.
RESULTS	The survey revealed that Hong Kong's gerontech ecosystem has improved in the past years. Among the 24 gaps identified, some of the most improved gaps include awareness, government risk aversion, and applied research funding, while many other gaps also saw some improvement. However, there are three gaps that have worsened, including insufficient retirement protection, academics' lack of incentives to pursue gerontech research, and complicated medical device registration processes.
	Put together, our survey findings suggest that there remain many areas within Hong Kong's gerontech ecosystem that need more support or attention. Therefore, we recommended five key strategic levers, namely supply side, demand side, infrastructure, investment and talent, to facilitate the expansion of the city's local gerontech ecosystem. The levers were supported by international review of evidence-based policies and practices, as well as analysis of local available resources in the community.
CONCLUSIONS	Moving forward, while there are undeniably many positive signs of synergy and commitment within Hong Kong's gerontech ecosystem, there remain many areas that still do not receive adequate support. As such, the five key strategic levers provide us clear directions and actionable evidence-based practices to further enhance Hong Kong's gerontech ecosystem in the coming years.

CS4.5-4

Perceptions of Utilizing a Mobile Health App for Self-Management: A Qualitative Study with Nurses and Breast Cancer Patients Receiving Chemotherapy

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- AIMS Our research team developed a nurse-led mHealth self-management program (mChemotherapy) for breast cancer patients undergoing chemotherapy. This qualitative study aimed to further understand the factors related to the feasibility of the program, the patients' rate of adherence to app usage, and app adaptation.
- **METHODS** Focus group interviews were carried out via online meetings. A total of eleven patients and five nurses who participated in the mChemothearpy program were enrolled from August 2022 to October 2022. Data reached saturation after three focus group interviews. Content analysis was adopted to analyze the interview transcripts. The interview transcripts were imported into the software (NVivo 12.0). Main themes and related sub-themes were drawn from the transcripts.
- **RESULTS** The participants exhibited a positive attitude towards the experience of using the app and expressed an intention to continue to use it to deal with chemotherapy-related symptoms. Barriers (older age and the lack of a contractual spirit) and facilitators (social support and being "born with" a tendency towards high adherence) to app usage were identified. Following the six-week program, patients underwent various transformations such as improved health awareness and a tendency to pay more attention to psychological symptoms. This program also led to various changes in the nurses, including a transformation from taking a reactive to a proactive approach to telephone calls by incorporating a self-regulation process and social support.
- **CONCLUSIONS** The findings from the focus group interviews stressed the importance of integrating technology and nursing social support in facilitating patient self-management. To boost adherence to the mHealth app-based intervention, patients must be internally motivated to engage in self-management and nurses should shift from providing reactive to proactive care, as these are the key factors that will enable breast cancer patients to continue using the app. In the future full-scale study, the app should be designed to have elderly-friendly functions.

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Promoting the Well-Being of the Elderly through Learning Media: Smart Ageing Academy

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AIMS	To develop a learning model to promote individual well-being for the elderly in the digital age.	
METHODS	Study design: Research and development project, with around 1 year in data collection in the outskirt of Bangkok, Thailand: Pathum Thani, Nonthaburi. Participant: Purposive sampling of 100 participants and 20 key informants were as follows: healthcare providers, elderly, local municipal and relevant staff.	
RESULTS	 Step1 Explores concept of the innovation of the learning model as a response to individualization learning and focuses on self-directed learning that leads people to be lifelong learners. Step 2 Reviewing and analyzing the current situation of elderly in the Thai context. Relevant data analysis, especially the need of the elderly related to basic knowledge of self-care in daily living with group discussion. Step 3 Creating the elderly well- being model: Module1 medication and healthy food; Module 2, happy mind and body; Module 3, friendly environment and preparing for disaster; Module 4, living will, silver economy and digital class. A learning model to promote individual well-being for the elderly was established along with a suggestion from experts in ageing field, experts from the Thai Health Promotion Foundation, and experts about the media creative for the elderly. Step 4 Creating the model and testing the model. 	
CONCLUSIONS	THAI SMART AGEING was developed under the concept of intelligent ageing and follows 3 principal ideas; knowledge that the elder needs to know; should know; and would like to know. The four models of the curriculum model were established. The pilot study for the fit of the model with the elderly vies massive Opened Online Course (MOOC) with 1557 elderly, 965 was successful in registering for learning by themselves and getting the certificate. Moreover, some of them said this course is easy and exciting to learn and gives more value to practice in daily living.	

CS4.5-6 Human-Centered Digitization of Comprehensive Geriatric Assessment (CGA) Project in the Philippines

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- AIMS The University of the Philippines Manila Wellness Initiative for Seniors and Elders (UPMWISE) Project 3 aims to improve the measurement, monitoring and research on healthy ageing by digitizing the CGA following the human-centered design (HCD) approach.
- METHODS This ethics-approved study utilized a cross sectional design following the phases of human-centered design. Phases I and 2 focused on understanding needs and challenges and developing concept and design, respectively. Nixed methods namely scopping review, focus group discussions (ECDs) with purpositively completed research

Mixed methods namely scoping review, focus group discussions (FGDs) with purposively sampled research and health facility based CGA assessors, facility administrator, program planners, and policy makers, and online surveys and concept validation among healthcare professionals (HCPs) and older persons (OPs) were conducted. FGDs were analyzed through NVivo Plus qualitative software while survey and concept validation data were analyzed using STATA.

RESULTS A total of 74 papers and policies relevant to the CGA were reviewed, 4 FGDs conducted with 19 participants, and online survey with 30 HCPs and 30 OPs respondents, and concept validation with 26 respondents were conducted. The initiative to digitize the CGA has been well received by OPs, HCPs, policy makers, program planners.

and a facility administrator based on the data from the FGDs, online survey, and concept validation. Data privacy, length of the interview, incomplete information, sensitive questions, difficulty in CGA administration due to patient's condition, follow up issues, and questions requiring recall were identified as the design challenges.

A system that is accessible, modifiable, or customizable per health setting, user-friendly, and one which addresses the identified challenges in CGA administration is envisioned by the potential end users of the digitized version.

CONCLUSIONS Addressing the identified issues and challenges and considering the support needs of those involved and end users of CGA is essential in designing the target digital CGA to enhance user experience and ensure end users' uptake of the technology.

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