

27th Annual Congress of Gerontology Advances in Gerontology



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Programme Rundown

1 TOGTAINING NUTUOWIT 08:30-09:00 Registration	
09:00-09:00 Kegistration	
Dr. Edward M F LEUNG	
President, Hong Kong Association of Gerontology09:05-09:20Officiating Guest and Keynote Speech	
Dr. Tony KO	
Chief Executive, Hospital Authority Plenary Session 1	
09:20-09:45 Legal Protection of Rights of Older People	
Mr. Charles CHIU	
Chairperson, Guardianship Board, Hong Kong	
09:45-10:10 Predicting Long Term Care Needs in an Ageing Population	
Dr. Edward M F LEUNG	
President, Hong Kong Association of Gerontology	
10:10-10:30 「香港安老院舍評審計劃」通過證書及良好措施獎狀頒授	
Plenary Session 2	
Quality of End of Life Care in Long Term Care - What and How	v to measure?
10:45-11:05 Prof. Helen CHAN	····
Associate Professor, Nethersole School of Nursing, The Chinese Uni	iversity of Hong Kong
Elder Abuse in the midst of COVID-19	
Dr. Elsie YAN	Vous Debite chuis Ilaineusite
11:05-11:25 Associate Head, Department of Applied Social Sciences, The Hong Prof. Daniel LAI	Kong Polylechnic University
	Pantiat University
Dean and Chair Professor, Faculty of Social Sciences, Hong Kong I The buffering effect of digital health literacy on anxiety during	
Dr. Angela LEUNG	COVID-19 pandenne
11:25-11:45 Associate Professor, School of Nursing, The Hong Kong Polytechnik	c University
Director, Centre for Gerontological Nursing, School of Nursing, The	
University	inong Kong i oryreenine
Intelligent bright light therapy system at residential dwellings for	or people with dementia
11:45-12:05 Prof. Kenneth FONG	
Professor, Department of Rehabilitation Sciences, The Hong Kong	Polvtechnic University
Making Meaning on Dementia Caregiving: A Generation Persp	
Dr. Vivian LOU	
12:05-12:25 Associate Professor, Department of Social Work and Social Admini.	stration, The University of
Hong Kong	
Director, Sau Po Centre on Ageing, The University of Hong Kong	
12:25-12:45 HKAG Annual General Meeting	
12:45-14:00 Lunch & Poster Presentation	
Outstanding Paper Award Presentation Session	
1. Transcranial direct current stimulation as an adjunct to cog	nitive training for
older adults with mild cognitive impairment	
Pablo Cruz GONZALEZ, Kenneth FONG, Ted BROWN	
Department of Rehabilitation Sciences, The Hong Kong Polytechn	ic University
14:00-15:15	2
2. E-Therapist – Chronic Knee Pain Management for Seniors a	nd Tele-monitoring
of Rehabilitation Treatment with the use of Technology	5
Dai, A. A., Wong, K. C. G., Ng, K. T. K., Wong, Y. H. T., Law, K. Y	Y.

	 3. Development of a Culturally-sensitive Theory-driven Advance Care Planning Game for Chinese Older Adults: Participatory Action Research Approach LIU Li, Ya-yi ZHAO, Helen Yue-lai CHAN The Nethersole School of Nursing, Faculty of Medicine, The Chinese University of Hong Kong 4. Chinese older adults' online health information seeking in the COVID-19 pandemic and its relationship with their psychological well-being Laurence Lloyd PARIAL, Xinyi XU, Patrick KOR, Teris CHEUNG, Eliza WONG, Alex MOLASSIOTIS, Angela LEUNG School of Nursing, The Hong Kong Polytechnic University 5. Knowledge of palliative care and attitudes towards end of life care amongst 		
	residents of Macao <u>TAM Kuai In</u> , LEONG Sok Man, ZHU Ming Xia, CHE Sok Leng <i>Kiang Wu Nursing College of Macau</i>		
15:15-15:45	 HKAG Project Presentation Journeys through the End of Life Care in Residential Care Homes in Hon Kong Yudo WONG St. George's University of London Stay Connected :RCHE Residents and the Society Ricky LAI Hong Kong Association of Gerontology 		
15:45-15:50	Outstanding Paper Award Prize Presentation		
15:50-16:00	Br	eak	
16:00-17:30	Free Paper Presentation Session (Health and Medical)	Free Paper Presentation Session (Residential and Community Care)	
	1. Effects of a home-based occupational therapy telerehabilitaion via smartphone for outpatients after hip fracture surgery: A feasibility randomised controlled study <u>LI Tsz Lui, Cabbee, HUNG Kin Nga Goris,</u> FONG Nai Kuen, Kenneth <i>Hospital Authority, OTD</i>	1. Well-being in Hong Kong Ageing Families: An Analysis of Correlates of Multidimensional Intergenerational Relationship Quality <u>LIU Chang</u> , BAI Xue Department of Applied Social Sciences, The Hong Kong Polytechnic University	
	2. Evaluation on Catheter Care Clinic: Co- joint AED Program for successful "Try Wean off Catheter" (TWOC) for AROU patients <u>WONG SW Arale</u> , KWOK PF, LEE YM, Chin CF, CHUNG YY, YUNG CY, SHA KY Edmund <i>Continence Service, United Christian</i> <i>Hospital, KEC, HA</i>	 2. Experiences of the COVID-19 pandemic in care home settings in Hong Kong and Nanjing: A tale of two cities CHAN YL, Helen¹, LEUNG MF, Edward², <u>ZHAO Ya-yi¹</u>, LIU Li¹, CHONG Yuen-yu¹, CHENG Ho-yu¹, CHIEN Wai-tong¹ [1] The Nethersole School of Nursing, Faculty of Medicine, The Chinese University of Hong Kong [2] Hong Kong Association of Gerontology 	

3. Factors associated with unplanned readmission for heart failure elderly aged 80 or above, under Integrated Care and Discharge Support (ICDS) scheme Case Management <u>WAI Hok Man</u> , SHA Kwok Yiu United Christian Hospital, M&G	3. Effects of direct and indirect intergenerational contacts on young people's attitude and prosocial behaviour towards older people <u>KWONG Nga Lai, Alice</u> and Elsie YAN Faculty of Health and Social Sciences, The Hong Kong Polytechnic University
4. Evaluating Effectiveness of Music Group in Improving Attention and Mood in Attention-Impaired Patients in Local Geriatric Day Hospital Setting <u>CHAN King Ho</u> , NG Chak Wing, LEUNG King Hung, CHUI Po Fan, SO Chi Tao Occupational Therapy Department, Princess Margaret Hospital	4. Using of a visual art intervention programme (MOLACE) to enhance holistic well-being for older people living with stroke in residential care homes: A feasibility randomised controlled trial study <u>PANG, P.C.P.</u> , CHEUNG, D.S.K. and CHIANG, V.C.L. School of Nursing, The Hong Kong Polytechnic University
5. Stepping into a new era - Physiotherapy Tele-rehabilitation in Geriatric Day Hospital (Shatin Hospital) <u>LEUNG Hong Cheng, Mandy</u> ¹ , CHIANG Kam Ha ¹ , Wendy, LAM So Ling, Stefanie ¹ , LI Suk Kuen, Carol ¹ , YIP Ling Fung, Benny ¹ , NG Wing Ling, Winnie ² , Elsie HUI ² [1] Physiotherapy Department, Shatin Hospital, Hong Kong [2] Department of Medical & Geriatrics, Shatin Hospital, Hong Kong	5. Engaging older people with early-stage dementia or mild cognitive impairment and their family caregivers in advance care planning in community care setting: A pilot cluster randomised controlled trial <u>YEUNG Chi Yan Cheryl</u> , CHAN Yue Lai Helen School of Nursing & Health Studies, The Open University of Hong Kong
6. The application of tele-rehabilitation in Occupational Therapy in Geriatric Day Hospital <u>CHOY Ping Cheong¹</u> , LEUNG YS ¹ , Liu YT ¹ , IP WM ¹ , LAU M ¹ , YUE SY ¹ , NG WL ² , DING Q ² , HUI E ² [1]Occupational Therapy Department, Shatin Hospital [2]Department of Medicine and Geriatrics, Shatin Hospital	6. The using pattern of audio-visual aids and cognitive decline in nursing homes <u>CHAN Wing Yiu</u> , Ko Ying Yan, KWAN Yiu Cho, Rick <i>Centre for Geriatric Nursing, School of</i> <i>Nursing, The Hong Kong Polytechnic</i> <i>University</i>
	 readmission for heart failure elderly aged 80 or above, under Integrated Care and Discharge Support (ICDS) scheme Case Management WAI Hok Man, SHA Kwok Yiu United Christian Hospital, M&G 4. Evaluating Effectiveness of Music Group in Improving Attention and Mood in Attention-Impaired Patients in Local Geriatric Day Hospital Setting CHAN King Ho, NG Chak Wing, LEUNG King Hung, CHUI Po Fan, SO Chi Tao Occupational Therapy Department, Princess Margaret Hospital 5. Stepping into a new era - Physiotherapy Tele-rehabilitation in Geriatric Day Hospital (Shatin Hospital) LEUNG Hong Cheng, Mandy¹, CHIANG Kam Ha¹, Wendy, LAM So Ling, Stefanie¹, LI Suk Kuen, Carol¹, YIP Ling Fung, Benny¹, NG Wing Ling, Winnie², Elsie HUI² [1] Physiotherapy Department, Shatin Hospital, Hong Kong [2] Department of Medical & Geriatrics, Shatin Hospital, Hong Kong 6. The application of tele-rehabilitation in Occupational Therapy in Geriatric Day Hospital CHOY Ping Cheong¹, LEUNG YS¹, Liu YT¹, IP WM¹, LAU M¹, YUE SY¹, NG WL², DING Q², HUI E² [1]Occupational Therapy Department, Shatin Hospital [2]Department of Medicine and Geriatrics,

wearin people <u>KWAN</u> CHEUN Simon <i>School</i>	associations between facemask g, beliefs and depression in older during the pandemic of COVID-19 Yiu Cho, Rick, LEE Hong, Paul, NG Sze Ki, Daphne, LAM Ching, of Nursing, The Hong Kong hnic University	7. Social engagement level and cognitive decline in long-term care settings <u>SHAM Ming Yu</u> , WONG Chi Hang, KWAN Yiu Cho, Rick <i>Centre for Geriatric Nursing, School of</i> <i>Nursing, The Hong Kong Polytechnic</i> <i>University</i>
White- Effect is SO Mer Family	Ipational Therapy Program on coat Hypertension and White-coat in Family Medicine Clinic <u>i Ki</u> , TONG Yuk Chung <i>Medicine and Primary Health Care</i> <i>ment, Kowloon West Cluster (KWC)</i>	8. Effects of a culturally adapted group based Montessori based activities on engagement and affect in Chinese older people with dementia: a randomized controlled trial LI Siu-fan, Perina, YAU Yee-man, CHAN Yue- lai, Helen, KWONG Ka-shi, <u>SUN Hoi-tung,</u> <u>Adrian, YU Ka-ying, Kathy</u> Senior Citizens Services, The Salvation Army

Poster Presentation

1. Effect of aromatherapy abdominal massage on improving constipation and quality of life (QoL) in elderlies: a systematic review

LAI Sze Ki Veronica

The Open University of Hong Kong

2. Narratives of Senior Citizens: Antecedents and Consequences of Successful Aging Katherine Ann D. ROOUE, Elmer D. BONDOC

Unihealth Southwoods Hospital and Medical Center

3. Exploring multidimensional risk factors for burnouts in direct care workers in long-term care setting: a systematic review

LO Hin Man Hermione, LUM Chor Ming Christopher

Faculty of Medicine, The Chinese University of Hong Kong

4. Is spiritual care "just chatting"? Conversation as an essential component of end of life care Caroline YIH

University of Aberdeen, Scotland

5. Continence Nurse Clinic: Evaluation on using Foley Fixation Security Holder for patients with indwelling catheter 2020

WONG SW Arale, Kwok PF, LEE YM, CHIN CF, CHUNG YY, YUNG CY, SHA KY Edmund *Continence Service, United Christian Hospital, KEC, HA*

6. A systematic review of treatment effectiveness on computer-based cognitive training (CBCT) and virtual reality cognitive training (VRCT) for older adults with MCI – a clinical comparison

HUNG Chui-wai, Sarah, HO Yin-ni, Annie, LAI Hiu-wai, Idy, LEE Sze-wing, Carol, PONG Shuk-kwan, Angela, LAI Ho-yin, Frank

The Hong Kong Polytechnic University, Department of Rehabilitation Sciences

7. Promoting Gerontological Education In University: Development and Evaluation of the Infusion Active Ageing Education Model

BAI Xue, LAI W.L., Daniel, LOU W.Q., Vivian, LEE L.F., Anita, ZHANG Jinjin *The Hong Kong Polytechnic University*

8. The usefulness and user experience of an electronic pain management programme for working population

TANG Shuk Kwan¹, MY TSE Mimi¹, LEUNG Sau Fong¹, Theofanis FOTIS² [1] School of Nursing, The Hong Kong Polytechnic University [2] School of Health Sciences, University of Brighton, United Kingdom

9. Overcrowding and Overloading in 365 Days! Strategies for Preventing Medication Administration Error in an Acute Geriatric Ward: Two Years Review TANG LN, CHAN SW, YUE SS, NG YB Department of Medicine and Geriatrics, United Christian Hospital

10."Manage your pain"- Chronic Pain Self-Management Day Program in community for older adults TSE So Sum Joyce, WONG King Ming, LAU Kai San, CHAN Ching Man *Yang Memorial Methodist Social Service*

11. Development of an educational program for middle- and older-age hypertensive adults in the community

TAM Hon Lon, WONG Mi Ling, Eliza, CHEUNG Kin School of Nursing, The Hong Kong Polytechnic University

12. Backward walk test: a reliable and valid tool to assess gait and balance in older adults with dementia CHAN LS, Wayne, CHEUNG Yue To, LEE Yin Wing, TEO Ai Mei, WO Hui Kiu, WONG Yui Department of Rehabilitation Sciences, Hong Kong Polytechnic University

13. Person Centred Care Approach for Elders with Dementia

WONG Chi Kin, MAN Kin Ting Hong Kong Society for the Aged

14. Making a happy and health aging: being a volunteer

TSE Mun Yee, Mimi¹, NG Sheung Mei, Shamay², BAI Xue³, LEE Hong¹, Paul, Raymond LO⁴, TANG Shuk Kwan¹

[1]School of Nursing, The Hong Kong Polytechnic University

[2] Department of Rehabilitation Sciences, The Hong Kong Polytechnic University

[3] Department of Applied Social Sciences, The Hong Kong Polytechnic University

[4] Department of Geriatrics and Palliative Medicine, Shatin Hospital, Hospital Authority, Hong Kong SAR

15. Burden of informal caregivers for older persons with chronic pain: Cross sectional study CHAN Yi Wing, CHENG Ka Yan, LAU An Sing, LEUNG Wai Man, TSANG Mei Po, YEUNG I Ka, TSE M. Y., Mimi

School of Nursing, The Hong Kong Polytechnic University

16. Relationship between lighting exposure and behaviours in activities of daily living in elders with Dementia residing in old age homes in Hong Kong

Alice TSANG

Elite Resource & Consultation Services

17. Pilot enhancement program for patients' problem of constipation in acute geriatric ward, UCH HO Kwan Wai Evan, CHAN San Wong, Aaron, TAI Kam Kwan

UCH M&G Ward 11B

18. Effects of dance intervention on agitation for people living with dementia: A systematic review Dauda SALIHU, KWAN Yiu Cho, Rick , WONG Mi Ling, Eliza, Umar Muhammad BELLO *Centre for Gerontological Nursing, School of Nursing, The Hong Kong Polytechnic University*

19. Using the Hong Kong Brief Cognitive Test (HKBC) as Predictor to Discriminate Discharge Destination for Patients with Stroke in Rehabilitation Setting

SO Yu Ching¹, NG Chak Wing¹, CHIU John Jong Hoh², SO Chi Tao¹

[1]Occupational Therapy Department, Princess Margaret Hospital,

[2] Department of Medicine and Geriatrics, Princess Margaret Hospital

Poster Presentation

30. Immersive virtual reality interventions for enhancing empathy of informal caregivers of people with dementia: a integrated review

MAK, C.Y., LEE, W.Y., LIN, L.F., NGOK, W.S., SIN, L.M.S., HO, K.H.M., JONES, C., & CHEUNG, D.S.K. School of Nursing, The Hong Kong Polytechnic University

31. Cognitive decline and incontinence in long-term care settings CHAU Ho Kin, TAM Pui Kwan, KWAN Yiu Chi, Rick *Centre for Geriatric Nursing, School of Nursing, The Hong Kong Polytechnic University*

Plenary Presentation

Legal Protection of Rights of Older People



Mr Charles CHIU Chung-yee

Chairperson, Guardianship Board, Hong Kong

Mr Charles CHIU Chung-yee was appointed the full-time Chairperson of Guardianship Board of Hong Kong SAR in February 2003. He has practiced law in Hong Kong since 1981. He was a panel arbitrator and mediator of Hong Kong International Arbitration Centre (HKIAC). Currently, he is the member of the governing boards of Haven of Hope Hospital and Haven of Hope Christian Service of Hong Kong. Before, he was also a member of Hospital Authority's sub-committees including Clinical Ethics Committee.

<u>Abstract</u>

Part A

Guardianship - Guardianship conceptual framework, mental health law history, local ordinance and international development, mental capacity law, Part IVB of Mental Health Ordinance, its legal framework and application, criteria on guardianship, financial powers of guardian, medical powers of guardian and how guardianship protect mentally incapacitated person.

<u>Part B</u>

Part II Orders - Emergency order, section 24 Order, Committee Order and statutory will.

Part C

Enduring Powers of Attorney - Meaning and purpose, Cap. 501 and Cap 31 of Laws of Hong Kong, 1st Law Reform Commission Consultation for simplication in 2007 and its Report in 2008, Amendment to Cap. 501 on 21 December 2011. 2nd Consultation in 2009 and its Report on 11 July 2011, extension of scope to health and Personal Care to create a Continuing Powers of Attorney regime and new supervisory powers to Court and Guardianship Board.

Predicting Long Term Care Needs in an Ageing Population



Dr Edward Leung

President, Hong Kong Association of Gerontology

Dr Edward Leung is currently President of Hong Kong Association of Gerontology and Director of Geriatric Medicine Centre (Healthy Ageing) Hong Kong Sanatorium and Hospital. He has been actively involved in practice and research in Geriatric Medicine and Gerontology. His area of interest include Epidemiology of Old Age, Falls, Healthy Ageing, Long Term Care and End of Life Care.

<u>Abstract</u>

With the rapid phase of population ageing across the world and especially on the significant increase in the number of old old in an Advanced Ageing Population we witness the surge in demand on Long Term Care in different part of the World. Many a time the provision of Long Term Care Services falls behind the demands and results in backlog in hospitals or insufficient care in the community. Similar situation happened now in countries in Asia in the past year. The present presentation will review the international situation on provision of services in Long Term Care, the predictor of long term care services. We will also review the mechanism of planning on provision of Long Term Care based on population needs and the health and functional condition of the ageing population.

Quality of End of Life Care in Long Term Care - What and How to measure?



Professor Helen Yue-lai CHAN

Associate Professor, Nethersole School of Nursing, The Chinese University of Hong Kong

Prof. Helen Chan's research interests focus on gerontology, longterm care and nursing ethics. She promotes palliative and end-of-life care for older adults and people with chronic progressive diseases through various interventional and policy research, health promotion and knowledge transfer projects. She is the recipient of ACU Titular Fellowships in 2017, Young Investigator Awards at the 19th Hong Kong International Cancer Congress in 2012 and 5th Hong Kong Palliative Care Symposium in 2008. Currently, she serves as

Honorary Advisor of Hong Kong YWCA, Hong Kong Society for Rehabilitation, Jockey Club Centre for Positive Ageing and Jockey Club CADENZA Hub, Associate Professor (by courtesy) of CUHK Jockey Club Institute of Ageing, Co-opt member of the Education Committee of the Nursing Council of Hong Kong and Council member of Hong Kong Association of Gerontology.

Abstract

Quality of end-of-life care in long-term care setting has been among the top government policy agenda globally and locally owing to population ageing and the high prevalence of chronic debilitating diseases. Previous studies have largely focused on determining the impacts on the care recipients' outcomes, such as symptom management and psychosocial wellbeing. There has been limited attention on the preparedness of the care setting as well as the taskforce for providing end-of-life care despite the inherited differences in the infrastructure and resources between long-term care and hospital settings.

To fill this gap, our project team has specifically developed two measures for examining the preparedness of care home staff and the care setting for palliative and end-of-life care based on comprehensive literature review and stakeholders' perspectives. The first measure aims to assess the willingness, capability and resilience of care home staff for providing palliative and end-of-life care to their clients and family members; whereas the second measure aims to assess the structure and process in relation to palliative, end-of-life and bereavement care provided at care home setting.

This presentation will introduce these two instruments and also share the changes captured by these two measures at staff and organization level among 36 local care homes over a three-year period in a region-wide quality improvement initiative in care home setting in Hong Kong. These two measures would be useful tools for benchmarking the quality of palliative and end-of-life care in long-term care setting. The findings of this project would also provide important insights on service policies and capacity building for promoting and thereby sustaining the quality of care in the setting.

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Elder Abuse in the midst of COVID-19



Dr. Elsie YAN

Associate Head, Department of Applied Social Sciences, The Hong Kong Polytechnic University

Elsie Yan received training as a psychologist and is currently an associate professor at the department of applied social sciences, the Hong Kong polytechnic university. She researched on elder abuse, dementia caregiving, and elder sexuality.



Prof. Daniel LAI

Dean and Chair Professor, Faculty of Social Sciences, Hong Kong Baptist University

Professor Daniel Lai is Chair Professor and Dean of Faculty of Social Sciences in the Hong Kong Baptist University. His expertise includes health and aging, culture and immigration, and outcome evaluation. Other than serving as Board of Directors of the American Society on Aging and Council of the Hong Kong Association of Gerontology, Professor Lai also sits on the editorial board of Research on Aging and Journal of Cross-Cultural Gerontology.

Abstract

Elder abuse occurs across socioeconomic and ethnic groups. A review of 52 studies from 28 countries found a prevalence rate of 15.7% (Yon et al., 2017). Abuse has serious consequences in mortality, physical and psychological health morbidities, and increased care utilization (Dong, 2015; Yunus, Hairi & Choo, 2017). The COVID-19 pandemic has brought about various changes, such as work-from-home arrangements, increased life stress, financial strains etc., which increases risk of elder abuse. This presentation summarizes findings from a community survey on elder abuse during the pandemic.

The buffering effect of digital health literacy on anxiety during COVID-19 pandemic



Dr. Angela Yee Man LEUNG

Associate Professor, School of Nursing, The Hong Kong Polytechnic University Director, Centre for Gerontological Nursing, School of Nursing, The Hong Kong Polytechnic University

Dr. Angela YM Leung is Director of the Centre for Gerontological Nursing (CGN) / Leader of research theme 'Aging and Health', Associate Professor of the School of Nursing of Hong Kong Polytechnic University. She was the awardee of the Hartford Geriatric Scholars Program at the Johns Hopkins University in 2014, and Distinguished Geronotological Nursing Educator by National Hartford Centre for Gerontological Nursing Excellence (NHCGNE). She is an active researcher in health

literacy and dementia caregiving, with a wide range of publications in international journals. She developed various interventions (photovoice, e-painting mobile app, a sensor-based system for alleviating stress) addressing the issues of depressive symptoms or stress among caregivers for persons with dementia. She has a strong belief that technology can help people to understand their current health status and make the informed health decision. Her projects were funded by Health and Medical Research Fund, Karolinski Institute (KI) – HK Polytechnic University (KI-PolyU) Collaborative Research Fund, Kamprad Foundation Fund of Sweden, and Hong Kong Jockey Club Charity Trust. She has good network with non-academic partner organizations, such as Hong Kong Housing Society, Astrix, Hong Kong Science and Technology (HKAG), the Committee on Rehabilitation of Hong Kong Society of Rehabilitation (HKSR), and Assessment Panel member on the Innovation and Technology Fund for Application in Elderly and Rehabilitation Care (I&T Fund) of Hong Kong Government. Internationally, Dr Leung is the Vice President of Asia Health Literacy Association (AHLA) and member of Global Working Group in Health Literacy, International Union of Health Promotion and Education (IUHPE) and Deputy Director of WHO Collaborating Centre for Community Health Services.

Abstract

Background. Older adults are the vulnerable group in the COVID-19 pandemic as the care and support they receive was restricted. Many of them are socially disconnected. Aims. This study aimed to assess the prevalence of anxiety and its relationships with digital health literacy (DHL), sense of coherence (SOC), information satisfaction (IS), and financial satisfaction (FS) among community-dwelling older adults.

Methods. Data was collected from three Asian Countries (China, the Philippines, and Singapore) in an online survey from April to May 2020 when there was a global COVID-19 pandemic. Structural equation modeling with path analysis was utilized.

Results. A total of 266 older adults were included, with about 43% indicated their anxiety. DHL was negatively associated with anxiety, while IS and FS were not. SOC mediated the relationship between DHL and anxiety.

Conclusion. With these results, actions should be taken to enhance older adults' digital health literacy and sense of coherence, as these capacities buffer anxiety during the pandemic.

Intelligent bright light therapy system at residential dwellings for people with dementia



Dr. Kenneth FONG

Professor, Department of Rehabilitation Sciences, The Hong Kong Polytechnic University

Kenneth Fong is Professor in the Department of Rehabilitation Sciences, The Hong Kong Polytechnic University. Before joining the university, he has been working as an occupational therapist for a couple of years. He is now the Programme Leader of BSc(Hons) Occuptional Therapy in PolyU, and Editor-in-Chief of the Hong Kong Journal of Occupational Therapy, and honorary advisors of several NGOs and support groups for people with chronic diseases and disabilities in Hong Kong. He received the Department Outstanding Teaching Award in 2011 and 2019, the Faculty Team Teaching Award of the Faculty of Health and Social Sciences in 2010 and 2019 respectively. His research interests are neurorehabilitation for people suffering from stroke, brain injury and dementia, and environmental adaption and assistive technology for people with disabilities.

Abstract

Human beings are synchronized to the circadian rhythms in our biological clock, i.e. sleep during night time and typically awake and active during day time in 24-hours solar day, however, the sleep/wake pattern is greatly impaired in people with dementia. People with Alzheimer's disease, may suffer from behavioral and psychological symptoms of dementia (BPSD), among them, disturbed sleep at night and increased agitation at day time seems to be quite annoying to family and caregivers. Recent studies in the literature shows that bright light therapy with appropriate light intensity, wavelengths, light colour, and exposure duration appears to be a possible method to improve sleep, hence reducing BPSD in patients with dementia at night. In order to determine the effects of a dynamic lighting system for the optimal therapeutic effect of bright light for people with dementia, this presentation is composed of 3 studies: 1) a review and meta-analysis to evaluate the effects of light stimulation on BPSD, sleep, and quality of life in people with dementia; 2) the relationship between ambient light, sleep and BPSD for people with dementia residing in residential dwellings and aged homes in Hong Kong; and 3) the findings of the effects of a pilot long-term bright light trial for people with dementia living in residential dwellings.

Making Meaning on Dementia Caregiving: A Generation Perspective



Dr. Vivian LOU W. Q

Associate Professor, Department of Social Work and Social Administration, The University of Hong Kong Director, Sau Po Centre on Ageing, The University of Hong Kong Dr. Lou Vivian W. Q. is the Director of Sau Po Centre on Ageing, and Associate Professor at Department of Social Work & Social Administration at The University of Hong Kong. Her research interests focus on family gerontology, in particular family caregiving for dementia, stroke, end-of-life older adults, and social adaptation and mental health of Chinese older adults and family caregivers. She also has a keen interest in building evidence-based models to empower older adults and their families. Dr. Lou is assistant editor of Ageing and Mental Health and editor of Asian

Journal of Gerontology & Geriatrics. Dr. Lou has been appointed as a member of the Elderly Commission, Statistics Advisory Board, Community Investment and Inclusion Fund, Senior Police Call Central Advisory Board, and Elderly Academy Development Foundation of the HKSAR Government. She is a fellow of the Gerontological Society of America, and a Council member of Hong Kong Association of Gerontology.

Abstract

Adult children contributed most in taking care of demented family members in Hong Kong. According to recent statistical estimation, Hong Kong is going to experience a much faster pace in population ageing in coming decades. The proportion of those aged 85 or above is estimated to increase from 2.7% in mid-2019 to 11.5% in 2069. Caring for someone with chronic conditions like dementia has long been a daunting task requiring a large amount of energy, time, dedication, and responsibility associated with highly variable and unpredicted care demands. The meaning making model suggests people are instinctively searching for meaning, in particular after encountering a life challenge and/or stressful condition such as COVID-19.and presentation highlighted adult children caregivers' evaluation on sense of loss during meaning search process. Generation differences between Baby Boomer Generation and Generation X on situational meaning making and well-being were identified. Theoretical and practical implications on dementia care strategies would be emphasized.

HKAG Project Presentation

Journeys through the End of Life Care in Residential Care Homes in Hong Kong - A Narrative Approach

As Hong Kong faces the many challenges of a rapidly ageing population, it must set out to improve the end-of-life care for elderlies across the city. Many families do not know that they have the power to decide how they want their final days to pass. It is imperative that they receive the support they need to make informed decisions on their end-of-life care, and to have their last wishes respected and acknowledged by the medical team.

The Jockey Club End-of-Life Community Care Project (JCECC) is a multi-disciplinary, multiinstitutional and cross-sectoral collaboration established in 2016 to improve the quality of endof-life care, enhance the capacity of service providers, and raise public awareness for end-oflife care. Its main objective is to enable the city's elderlies to have informed choices of care and have an improved quality of life. With this collection of case studies, we aim to elicit the impact this project has made on end-of-life care in residential care homes in Hong Kong. Our goal is to understand how participants have benefited from this program, and to learn from these cases and improve patient care for the future.

To gather the necessary materials, we interviewed numerous project nurses and social workers for their first-hand experience involving the care of patients in various care homes. We obtained information about patients' history, the care they received in care homes, what transpired in the final weeks before passing away, and reflected on challenges and lessons learned from these cases.

We have compiled over 20 cases studies for this casebook, detailing patient journeys in care homes ranging from the years 2016 to 2020. It was concluded that the project vastly improved the quality of participants' end-of-life care, and clearly addressed the patients' and family's many concerns and expectations. Patients were made aware of the freedom they have in planning for their end-of-life care, granting them peace of mind knowing that they need not worry about their final days.

孤島移除 - 與社會同行,填補社會不足

由 2019 年底開始,新冠肺炎疫情在香港肆虐感染人數不斷增加。長者和長期病患者是 高危群組,染疫後死亡率甚高,為保護院舍內的體弱長者免受感染,安老院舍推出多種 隔離措施,如限制院友外出、禁止親友探訪、停止群體活動。院舍嚴格執行隔離措施, 雖然可以保護長者免受感染,但缺少了家人、義工的探望,長者們社交生活大減,缺乏 人與人之間的溝通及關愛,孤獨感大增,容易情緒低落,陷入社交孤立(social isolation), 大大增加患上憂鬱症的風險。香港大學林一星教授曾表示,疫情下,估計有四萬長者成 為孤島長者,身、心、社、靈都出現很大負面影響。 有報導指出:

- 。78 歲的婆婆困在家中,探不到住在安老院的老伴,時常潸然淚下
- 。 住在院舍 90 歲的伯伯,因為家人無法探望已經三天沒說話了

在利希慎基金及仇景、傅少芳伉儷慈善基金的贊助下,本會推出「孤島移除」行動,支援居於深水埗區及九龍東的中小型私營安老院舍中的長者。透過科技協助,讓居住院舍

- 內的長者與家屬、社會保持聯繫,減少其孤獨和負面情緒。安裝及提供基本視像 軟硬件配套
- 配合外展專業服務團隊訓練服務需要,預先安裝流動應用程式
- 技術支援人員親臨院舍,即場教導職員使用提供電話熱線作技術上支援





計劃預計為 26 間院舍·配置 60 部智能設備·希望可以惠及超過 1,000 名院友· 讓他們可以透過視像通話與家屬「見面」,與家人保持聯絡,令長者精神和心理 上獲得支援。部份院舍同工更會為長者拍攝日常生活短片傳送給家屬,讓家屬減 輕擔憂,從而願意配合院舍防疫措施,減少「硬闖」院舍的行為。



安老院舍外展專業服務亦透過計劃所提供的智能配備,在抗疫期間透過視像繼續為長者提供專業服務,安排不同活動及訓練,身、心、社、靈得以支援。



*感謝香港基督教服務處及香港聖公會福利協會之安老院舍外展專業服務團隊推薦合適院舍。

Journeys through the End of Life Care in Residential Care Homes in Hong Kong - A Narrative Approach

As Hong Kong faces the many challenges of a rapidly ageing population, it must set out to improve the end-of-life care for elderlies across the city. Many families do not know that they have the power to decide how they want their final days to pass. It is imperative that they receive the support they need to make informed decisions on their end-of-life care, and to have their last wishes respected and acknowledged by the medical team.

The Jockey Club End-of-Life Community Care Project (JCECC) is a multi-disciplinary, multiinstitutional and cross-sectoral collaboration established in 2016 to improve the quality of endof-life care, enhance the capacity of service providers, and raise public awareness for end-oflife care. Its main objective is to enable the city's elderlies to have informed choices of care and have an improved quality of life. With this collection of case studies, we aim to elicit the impact this project has made on end-of-life care in residential care homes in Hong Kong. Our goal is to understand how participants have benefited from this program, and to learn from these cases and improve patient care for the future.

To gather the necessary materials, we interviewed numerous project nurses and social workers for their first-hand experience involving the care of patients in various care homes. We obtained information about patients' history, the care they received in care homes, what transpired in the final weeks before passing away, and reflected on challenges and lessons learned from these cases.

We have compiled over 20 cases studies for this casebook, detailing patient journeys in care homes ranging from the years 2016 to 2020. It was concluded that the project vastly improved the quality of participants' end-of-life care, and clearly addressed the patients' and family's many concerns and expectations. Patients were made aware of the freedom they have in planning for their end-of-life care, granting them peace of mind knowing that they need not worry about their final days.

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^根據Nielsen尼爾森公司2017年1月至2019年12月香港紙尿片市場(紙尿褲及紙尿片類別)零售調查報告 (⇔2020 尼爾森公司版權所有) *香港醫護學會(最受醫護人員戰迎健康品牌大獎2019) #與添寧獲飛權表成人紙氏り日羿吐修(Tena Silp Maxi L vs Tena Silp Plus L, 2016) 1 整個添寧系列中首個全透氣產品(不包括緣筋及膠貼位置)

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Outstanding Paper Presentation

Transcranial direct current stimulation as an adjunct to cognitive training for older adults with mild cognitive impairment

<u>Pablo Cruz GONZALEZ</u>, Kenneth FONG, Ted BROWN Department of Rehabilitation Sciences, The Hong Kong Polytechnic University

Background: Cognitive training (CT) for persons with mild cognitive impairment (MCI) may not be optimal for enhancing cognitive functioning. Coupling CT with transcranial direct current stimulation (tDCS) may maximize the strength of transmission across synaptic circuits in pathways that are stimulated by CT. The synergistic effects arising from this combination could be superior to those of the administration of CT alone.

Objectives: To investigate whether the receiving tDCS combined with CT would be superior to receiving CT alone on domain-specific and task-specific cognitive outcomes in older adults with MCI.

Methods: This double-blind, sham-controlled randomized trial included 67 older adults with MCI assigned to three groups: 1) tDCS combined with CT (tDCS+CT), 2) sham tDCS combined with CT (sham tDCS+CT) and 3) CT alone. Nine sessions of computerized CT were administered to the three groups for three weeks. In addition, tDCS and sham tDCS was delivered to the left dorsolateral prefrontal cortex to the tDCS+CT and sham tDCS+CT groups respectively, simultaneously with CT. Standardized cognitive assessments were carried out at baseline, post-intervention, and at six-week follow-up. Participants' performance in the CT tasks was rated every session.

Results: Improvements in global cognition and everyday memory (p < 0.017) were found within the three groups after the intervention and at follow-up with larger effect sizes noted in the tDCS+CT group (d > 0.94). However, there were no significant differences between groups. Regarding the CT outcomes, significant differences among groups were observed in favour of the tDCS+CT group in decreasing the completion and reaction times of working memory and attention activities (p < 0.017).

Conclusions: tDCS combined with CT was not superior to sham tDCS with CT and CT alone in its effects on domain-specific cognitive outcomes, but it did provide comparatively larger effect sizes and improve the processing speed of task-specific outcomes.

E-Therapist –Chronic Knee Pain Management for Seniors and Telemonitoring of Rehabilitation Treatment with the use of Technology

Dai, A. A., Wong, K. C. G., Ng, K. T. K., Wong, Y. H. T., Law, K. Y. Hong Kong Sheng Kung Hui Welfare Council Ltd

Background: With population ageing, degenerative knee pain problem is increasingly prevalent amongst older adults, which influenced their independent living and physical-psycho-social well- being. Without adequate healthcare skills and motivation, older adults suffered from osteoarthritis of knee heavily reply on pharmaceutical intervention, increasing overwhelming need of medical support. The project promoted non-pharmaceutical intervention incorporated self-management strategies delivered by the multidisciplinary team, including building up of knowledges, mind sets and proper practices through regular exercise patterns for 24 weeks. Specifically, a mobile application, with motion detector was developed and applied into exercise intervention. Under the supervision of progress and follow ups with physiotherapists, it benefits elderly participants to obtain the tailor-made exercise prescription, as well as perform proper exercises with fun game.

Objectives: The program aims i) to improve self-management capacity for older adults with degenerative knee pain; ii) to strengthen social-medical interfacing that result in better case management on chronic condition.

Methods: The program adopted a quasi-experimental design with pre-post assessment, at baseline, in week 12 and in week 24 of the intervention. Respondents were recruited from 7 elderly community centres, who satisfied with the criteria: i) aged 60 or above and dwelling in the community; ii) score 1 or above of the self-reported knee pain level; iii) without any severe medical conditions in the past three months; and iv) cognitive sound. Eligible participants were grouped into three categories varied with their performance of physical assessment and received specific intervention. Total 516 participants were enrolled and 202 completed the pre-post assessment in 12 weeks. The outcome measures of behaviour, attitude, health condition and knowledge were evaluated.

Result: Preliminary findings indicated the significant positive change of participants from three categorical groups before and after the 3-month intervention: flexibility (t(201)=4.33, p<.000), muscle endurance (t(199)=6.43, p<.000), leg strength (t(200)=3.86, p<.000), mobility, and static and dynamic balance (t(201)=2.67,p<.000).

Conclusion: The intervention protocol is effective in alleviating pain symptoms and improving physical ability for older adults with osteoarthritis of knee. The initial findings also provided the evidence base for self-management care and establishment of exercise habit with the application of the innovative technology.

Development of a Culturally-sensitive Theory-driven Advance Care Planning Game for Chinese Older Adults: Participatory Action Research Approach

LIU Li, Ya-yi ZHAO, Helen Yue-lai CHAN

The Nethersole School of Nursing, Faculty of Medicine, The Chinese University of Hong Kong

Objective: Advance care planning (ACP) could improve the concordance between individual care preference and the end-of-life (EOL) care provided. However, relevant ACP conversation is considered a taboo, particularly in Chinese culture. This study aimed to develop a culturally-sensitive theory-driven ACP game to promote ACP behaviors among Chinese older adults.

Methods: A participatory action research method was used between September 2019 and July 2020. A multidisciplinary expert panel was consulted in the game development process. ACP game interventions were systematically reviewed to identify the appropriate theoretical framework and effective components for the game design. Four focus group discussions were conducted with 29 older adults to review the game design. A theory-driven ACP board game was designed based on the findings. Then, a pilot study was conducted in a community care centre in Hong Kong. Two focus group interviews with participants (n=15) and the expert panel (n=7) refined the ACP game.

Results: The participants appreciated that the game empowered them to communicate their views towards future care. However, three aspects were identified for further modification to improve the experience of playing the game, including (1) clarity of game questions; (2) playfulness; and (3) length of game.

Conclusion: To the best of our knowledge, this study is the first using a participatory action research approach to guide the development of a culturally-sensitive theory- driven ACP game. The findings revealed that the board game is a feasible approach to engage older adults in discussion regarding EOL care issues, although there is room for improvement to increase the attractiveness and playfulness of the game. Further studies are warranted to explore the effects of the ACP game on ACP behaviors among Chinese older adults.

Chinese older adults' online health information seeking in the COVID-19 pandemic and its relationship with their psychological well-being

Laurence Lloyd PARIAL, Xinyi XU, Patrick KOR, Teris CHEUNG, Eliza WONG, Alex MOLASSIOTIS, Angela LEUNG School of Nursing, The Hong Kong Polytechnic University

Objectives: The COVID-19 outbreak has led to the surge of health information, which also contributed to the massive spread of misinformation or *infodemic*. This situation could easily affect older adults who have limited capabilities in understanding health information and are vulnerable to experience psychological burdens from the COVID- 19 pandemic. This study aimed to investigate the online health information seeking of older adults, and its effects on their psychological well-being during the COVID-19 outbreak.

Methods: This is part of a multi-country, cross-sectional study. This paper particularly included data on people aged ≥ 60 from Mainland China, Hong Kong, and Macau, gathered from April–May 2020. Descriptive statistics were utilized to explore information seeking patterns, and logistic regression was employed to determine their relationships to older adults' psychological well-being.

Results: A total of 180 older adults were included, with majority having accessed the Internet through the local language to seek COVID-19 information. Major information sources included search engines and news portals, together with social media, video sharing sites, and online encyclopedias. Health-specific platforms were seldom accessed. Information were usually sought regarding the spread of COVID-19, transmission routes, and symptoms. Further analysis revealed that the availability of health information in Chinese (OR=4.69, p<0.05), search for topics which provide hygiene recommendations (OR=6.78, p<0.05), and access to blogs which offer health instructions (OR=3.59, p<0.05) were positively related to older adults' psychological well-being. Contrastingly, information received about individual measures on how to protect against COVID-19 (OR=0.10, p<0.05) and social restrictions (OR=0.19, p<0.05) were associated with lower psychological well-being.

Conclusion: The Internet is a valuable tool for Chinese older adults to navigate through the COVID-19 situation, with social media as a common health information source. Older adults prefer to access easily understandable information, and receive recommendations to improve their overall health during the COVID-19 outbreak. Notably, resources that could enhance their capacity to protect themselves against COVID-19 and measures that could manage social isolation should be offered, to promote their mental health during the COVID-19 pandemic.

Knowledge of palliative care and attitudes towards end of life care amongst residents of Macao

TAM Kuai In, LEONG Sok Man, ZHU Ming Xia, CHE Sok Leng Kiang Wu Nursing College of Macau

Purpose: The study explores the knowledge of palliative care and attitudes towards end of life care amongst residents of Macao.

Methods: A cross-sectional questionnaire survey was conducted online and face-to-face. Macao residents aged 18 and above were recruited between July to September 2020. Structured questionnaire was used to assess Macao residents' palliative care knowledge, preferences of end of life care, end of life care attitudes.

Results: A total of 737 responses were valid. 65% of the respondents were female, aged between 19 to 101; 56.5% of the respondents had college level or higher. The average correct rate of palliative care knowledge was 62.9%. The majority of respondents understood that the goal of palliative care is to eliminate pain and suffering for patients. The most important aspect of end of life care was the management of pain (32.3%). Pertaining to end of life care wishes, 62% of the respondents chose to prioritise suffering alleviation, which was significantly higher than those who wished to have their lives extended at all cost (18.6%). Higher scores of palliative care knowledge (OR = 1.29, p<0.001), the education level of secondary school (OR=2.86, p<0.05) and bachelor or above (OR = 3.97, p<0.01) were identified as significant predictors of choosing suffering alleviation rather than life prolongation, if being diagnosed with terminal illness and less than 6 months to live.

Conclusion: The public of Macao was found to have an average understanding of palliative care. Concerning end of life care, the public tended to choose pain alleviation, rather than receiving futile life prolonging interventions. People with better knowledge about palliative care and those with higher education level were proportionately more likely to opt for the alleviation of suffering. The results suggested that by strengthening the knowledge of palliative care, people would be encouraged to prioritise comfort-oriented end of life care.

This research has received funding from the Higher Education Foundation of Macao.

Free Paper Presentation (Health and Medical)

Effects of a home-based occupational therapy telerehabilitaion via smartphone for outpatients after hip fracture surgery: A feasibility randomised controlled study

LI Tsz Lui, Cabbee, HUNG Kin Nga Goris, FONG Nai Kuen, Kenneth Hospital Authority, OTD

Purpose: This study aimed to investigate the effects of a home-based occupational therapy telerehabilitation (TR) via smartphone in enhancing functional and motor performance and fall efficacy for outpatients receiving day hospital rehabilitation after hip fracture surgery in Hong Kong.

Methods: This was a feasibility randomised controlled trial with two groups- an experimental group and a comparison roup - and a sample of 31 older adults attending a geriatric day hospital who had undergone hip fracture surgery within 12 weeks of diagnosis. Patients were assessed at baseline, immediately after a three-week intervention and at three- week ost-intervention follow-up for motor performance, activities of daily living (ADL) functioning and fall efficacy.

The experimental group received a home programme using the Caspar Health e-system and a mobile app for smartphones, while the comparison group received paper-and-pencil instructions for the home programme on a weekly basis or three weeks.

Results: Compared to the comparison group, significant improvements in fall efficacy and instrumental ADL performance at post intervention and follow-up were found in the experimental group. However, in the comparison group, inadequate social support was a factor contributing to better muscle strength testing in both the affected and non-affected legs. There were no significant differences between the two groups in regard to the other variables.

Year: 2020

Evaluation on Catheter Care Clinic: Co-joint AED Program for successful "Try Wean off Catheter" (TWOC) for AROU patients

WONG SW Arale, Kwok PF, LEE YM, Chin CF, Chung YY, Yung CY, Sha KY Edmund Continence Care Service, Nursing Service Division, United Christian Hospital

Introduction: Acute retention of urine (AROU) is an emergency condition, which urinary catheter insertion for urine drainage is the common practice for patients, however, with a urethral indwelling catheter inserted, patients could be unpleasant and feeling inconvenience in their daily living. Therefore, to facilitate early management and minimize in-patient hospitalization rate, a co-joint AED Program was implemented in Continence Catheter Care Clinic (CCC) in early November 2013. The service pledge guaranteed once the patient had been catheterized, continence nurse will provide assessment, catheter care education and formulate care plan for the patients within 9 days. To constant reviewing patient's care and management outcomes, the program data was evaluated from 1st November 2019 to 30th April 2020.

Objective: To review patient 's outcomes and effectiveness of the program, 1) general demographic data, 2) case management waiting time and 3) findings on case treatment plan were scrutinized.

Methodology: Retrospective study was done with patient's data and treatment journal details were tracked in Catheter Care Clinic (CCC) at United Christian Hospital from 1st November 2019 to 30th April 2020.

Results: Total 94 male patient's data were obtained. Average age of patients is 75 (55-96), continence nurse had provided service within 6.8 days in average, which is seven times shorter compared to patients who first attending Urology Clinic (The average days is 48.7). In general, CCC service could reduce near 16 cases of unnecessary admission per month. The first three common arousing factors of AROU are constipation (31%), ingestion of cold/cough mixture (29%) and urinary tract infection (24%) representatively, the average bladder scanning (BS) urine volume is 661 (262-1700) ml and 3 (2.5-6) FB in digital rectal examination was noted. Before TWOC, 97% of patients was already prescribed Terazosin (61.7%) and Tamsulosin (22.3%). On the same day of the first CCC attendance, soon after the continence nurse assessment, 15% of total patients could success TWOC with BS 83.3ml was noted (The average days for patient to wait for catheter removal was 6.8 days), and 57% of patients had been referred to community nurse for TWOC at home, the success rate was 45.7% with BS 68.9ml (The average days for catheter removal was 17.9 days). However, eventual 11% of patients needed self- intermittent or long-term catheterization whereas 17% of patients needed surgical intervention with average 371ml residue urine was noted. Overall, for patients who had failed TWOC finally, they needed to wait another 32.3 days in average before a surgery could possibly be arranged after the urologist consultation.

Conclusions: To handle patients with AROU, identifying the transient causes, providing education to prevent disease recurrence, reduce potential complications, enhancing successful TWOC rate as well as provision of subsequent care plan are important. Continence nurse also had a unique role for conducting effective and efficient care in helping patients shorten their barrier time of using indwelling catheter meanwhile greater satisfaction on the given care could be achieved.

Factors associated with unplanned readmission for heart failure elderly aged 80 or above, under Integrated Care and Discharge Support (ICDS) scheme Case Management

<u>WAI Hok Man</u>, SHA Kwok Yiu United Christian Hospital, M&G

Background: Elderly with congestive heart failure exacerbation are at risk of unplanned readmission. Integrated Care and Discharge Support (ICDS) scheme in Hospital Authority aims to provide support to individuals with high readmission risks by multidisciplinary interventions. However, unplanned readmissions are still common during transitional care, especially for patients aged 80 or above. Unplanned readmission is associated with poor quality of life and adverse outcomes.

Objectives: To investigate risk factors associated with 28-day unplanned readmission for elderly aged 80 or above, who have congestive heart failure and been recruited to ICDS case management program. By understanding those risk factors, we can improve our ICDS program, so that we can improve the care of elderly patients with congestive heart failure.

Methods: This is a retrospective cohort study. Inclusion criteria: Age more than 80 or above, admitted to United Christian Hospital for congestive heart failure, post discharge recruited to ICDS Case Management program, between 1^{st} January 2016 to 31^{st} December 2017. Exclusion criteria: Patients who were institutionalized into residential care home; or patient refusal, at any time point during program. Case notes were reviewed for data collection. Outcome measure: Unplanned readmission within 28 days post index hospitalization. Statistical analysis: Univariate analysis between outcome and each independent variable according to nature of data. Those variables appeared to be associated with readmission in univariate analysis, defined as statistical significance (p<0.1), were then adopted as potential predictors of outcome in logistic regression. The critical level of statistical significance was set at p<0.05.

Results: Total 331 patients entered into final analysis. 96 patients had unplanned readmission within 28 days post discharge. Unplanned readmission rate was 29%. Factors associated with increased unplanned readmission after logistic regression included: Patient live alone [OR 2.88, CI (1.05 - 7.90), p=0.04]; poor compliance to salt and fluid restriction [OR 5.723, CI (3.177-10.310), p<0.05]; increased length of stay for index hospitalization [OR 1.04, CI (1.008-1.072), p=0.012]

Conclusion: Heart failure elderly aged 80 years old or above, who had longer length of stay for index hospitalization, live alone, poor salt and fluid compliance, were associated with increased unplanned readmission despite under ICDS management. Suggestions were made to improve the transitional care for heart failure elderly, so as to improve the quality of life.

Evaluating Effectiveness of Music Group in Improving Attention and Mood in Attention-Impaired Patients in Local Geriatric Day Hospital Setting

<u>CHAN King Ho</u>, NG Chak Wing, LEUNG King Hung, CHUI Po Fan, SO Chi Tao Occupational Therapy Department, Princess Margaret Hospital, Hospital Authority

Introduction: In recent years, music-based intervention has been widely implemented in geriatric settings to treat cognitive, affective and behavioral problems (Zhang et. al, 2017). This study specifically investigated the effect of music group on attention and mood in attention-impaired patients in Geriatric Day Hospital. [Methods] A non-randomized controlled trial was conducted with convenience sampling of GDH patients. Subjects were (1) interested in musical activities (2) attention-impaired, who either scored below the 16th percentile in Hong Kong Montreal Cognitive Assessment (HK-MoCA) or Hong Kong Montreal Cognitive Assessment 5-min protocol, or did not get full score in the attention subtest in HK-MoCA (3) without visual impairment, hearing impairment, dysphasia, unstable medical conditions or behavioral problems. Subjects were assigned to receive 4 one-hour sessions of (1) music group or (2) conventional occupational therapy training as control. Content of music group included (1) sustaining attention in musical tasks (2) reacting timely to specific stimuli (3) replicating rhythm and melody of songs. Outcome measures were categorized as (1) Trail Making Test A (TMT-A) and Digit Span Test (DST) for attention (2) Subjective Happiness Scale (SHS) for mood (3) The World Health Organization Five-item Well-being Index (WHO-5) for well-being. [Results] Data was collected from September 2019 to February 2020. The between group pre-post differences of subjects in the music group (n=20) and the control group (n=20) were analyzed. Results indicated that subjects in the music group has significantly larger improvement in attention than those in the control group as shown in TMT-A (p=0.027), backward sequence (p=0.015) and backward span (p=0.048) in DST. Subjects in the music group also demonstrated significantly larger increase in mood and well-being as reflected in SHS (p=0.000) and WHO-5 (p=0.001) when compared to those in the control group. [Conclusion] This suggests that music group may improve attention and mood of attention-impaired elderly.

Reference: Zhang, Y., Cai, J., An, L., Hui, F., Ren, T., Ma, H., & Zhao, Q. (2017). Does music therapy enhance behavioral and cognitive function in elderly dementia patients? A systematic review and meta-analysis. *Ageing research reviews*, *35*, 1-11.

Stepping into a New Era - Physiotherapy Tele-rehabilitation in Geriatric Day Hospital

LEUNG Hong Cheng, Mandy¹, CHIANG Kam Ha¹, Wendy, LAM So Ling, Stefanie¹, LI Suk Kuen, Carol¹, YIP Ling Fung, Benny¹, NG Wing Ling, Winnie², Elsie HUI² [1]Physiotherapy Department, Shatin Hospital, Hong Kong [2] Department of Medical & Geriatrics, Shatin Hospital, Hong Kong

Purpose: A pilot multi-disciplinary tele-rehabilitation service had been implemented in Geriatric Day Hospital (GDH) at Shatin Hospital (SH) during the service suspension from March to June 2020 due to COVID-19 pandemic. This paper sets to explore the feasibility of Physiotherapy tele-rehabilitation in enhancing efficiency of service delivery and quality of patient care.

Methods: All active GDH patients (n=144) were recruited into the program with consent. Patients were then provided with comprehensive assessment, individualized home exercise program, advice and education, continuous monitoring through phone call, video call and messaging. All assessments and interventions were only conducted under safe condition and environment, or with assistance from carers. Outcomes concerning functional mobility and balance, including Modified Functional Ambulation Classification (MFAC), Berg Balance Scale (BBS), Modified Rivermead Mobility Index (MRMI), Timed Up and Go Test (TUG) and 6 Minute Walk Test (6MWT) were analyzed. Reliability of the estimated MFAC (assessed by phone call or videotaping) was evaluated by comparing to the post-program MFAC (re-assessed upon face-to-face session). Survey on Patients and carers satisfaction was also conducted.

Results: A total of 114 patients completed the Physiotherapy tele-rehabilitation program and outcome evaluation within 14 weeks. Each patient received an average of 4.9 Physiotherapy tele-sessions, while average service time for initial assessment and subsequent follow-ups were 36.7 minutes and 18.2 minutes respectively. By comparing pre and post program outcomes, it is demonstrated that patients had significant improvement in ambulatory status (MFAC: 4.94 vs 5.15, p<0.05), balance (BBS: 29.97 vs 32.37, p<0.05), functional mobility (MRMI: 28.12 vs 29.30, p<0.05) and walking endurance (6MWT: 135.09 vs 155.29, p<0.05); clinical improvement in walking speed (TUG: 44.95 vs 40.31, p=0.14). There was no significant difference in estimated MFAC and post-program MFAC (5.27 vs 5.15, p=0.071), which showed that estimation of MFAC during tele-assessment could be a reliable tool in measuring ambulatory status in tele-rehabilitation. A high patient satisfaction rate (100%) was also reported.

Conclusion: Physiotherapy tele-rehabilitation program was a feasible mode of service delivery. It promoted service efficiency and quality by allowing delivery of Physiotherapy assessment and intervention disregarding physical boundaries; improving patient's functional outcomes; and providing ample carer support with high patients/carers satisfaction. It is a convenient complementary service model to conventional physical training for enhancing quality of care no matter where you are.

The application of tele-rehabilitation in Occupational Therapy in Geriatric Day Hospital (Shatin Hospital)

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Purpose: Under the influence of COVID-19 pandemic, the service of Geriatric Day Hospital (GDH), Shatin Hospital was suspended. GDH launched a pilot program of tele-rehabilitation to explore effectiveness of this mode of service in order to maintain continuity of treatment. Four core Occupational Therapy (OT) service areas were identified consisting of: 1) home screening assessment and modification; 2) assistive device prescription and usage review; 3) ADL & cognitive assessment and home program; and 4) carer skills assessment and education.

Method: All GDH patients were recruited to the program. They were contacted in combination of phone call and mobile applications. Montreal Cognitive Assessment Hong Kong Version (HK-MoCA), Modified Barthel Index (MBI) & Lawton Instrumental Activity of Daily Living (Lawton IADL) were adopted as outcome measures before and after the program. Besides, all service users also completed OT tele-rehabilitation service satisfaction survey after the program.

Results: From March to June 2020, 139 patients received OT tele-rehabilitation. 109 patients completed the full sets of evaluation. Paired t-test was used for analysis. HK-MoCA scores increased from 16.9 to 17.8 (p<0.001); MBI and Lawton IADL scores rose from 74.4 to 78.7 (p<0.001) and from 3.1 to 3.4 (p<0.001) respectively. Out of the 139 service users, 135 completed the OT service satisfaction survey. 64% of respondents agreed the tele-rehabilitation could improve or sustain their self-care ability. 62% agreed the service could help fall prevention and home safety. 96% of respondents agreed the tele-rehabilitation to be integrated into routine GDH services in future including home programme, home safety screening, assistive device prescription and follow up. In the survey, 61 respondents were caregivers, 33% of them expressed that their caring stress could be alleviated.

Conclusion: COVID-19 pandemic is a catalyst to speed up the application of tele-rehabilitation in GDH. OT gained experience on the effectiveness of this mode of service. Early screening-Early intervention is a remarkable advantage identified in the program. It could be embedded in conventional GDH practice and played a supplementary role in the new normal.

The associations between facemask wearing, beliefs and depression in older people during the pandemic of COVID-19

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Background: The COVID-19 pandemic has affected over 100 countries. The mortality rate is higher among older people. In Asia, the universal wearing of facemasks is thought to be effective at preventing infections. Health belief is known to be associated with health behaviours, such as facemask wearing. However, there is a global shortage of protective equipment including facemasks. It is unclear how beliefs and facemask short affect facemask wearing behaviours and emotional health of older people during the pandemic.

Purposes: The aim in this study was to explore the associations among the depression, health beliefs, and facemask-wearing behaviours of older people.

Conclusion: The depression rate of older people during the COVID-19 pandemic is alarming. Older people with better health beliefs specifically in perceived severity and efficacy may improve facemask- wearing behaviours. Older people who have facemask shortage and a better health belief are more depressive. Yet, a better health belief protects older people from depression during facemask shortage. Mental health support during the pandemic should be a priority. Health education promoting older people's specific health beliefs should be advocated.
Occupational Therapy Program on White-coat Hypertension and White-coat Effect in Family Medicine Clinic

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Introduction: White-coat hypertension (WCHT) and white-coat effect (WCE) are commonly detected for elderly in primary health care setting, some studies reported that this phenomenon may increase long-term cardio-vascular risk. A new Occupational Therapy (OT) program using relaxation techniques with occupational lifestyle redesign was implemented and aimed to enhance elderly's stress copying skills, reflect actual BP in clinical setting and enhance elderly with chronic disease management.

Methodology: A new OT program was started since Jan 2019 till present. Patients would attend an education group, followed up by two individual consultations. A tailor-made 10- point Likert scale questionnaire was completed for preand post- comparison on the knowledge on chronic disease management, and the self affinery on the skills application. Pro- and post- comparison on blood prossure (PP) and pulse rate (PP) was

the self-efficacy on the skills application. Pre- and post- comparison on blood pressure (BP) and pulse rate (PR) was measured during individual follow up.

Results: Total 55 elderly aged from 65 to 90 years old (with mean age 73 years old), 41 were female. All (100%) reported anxiety during clinical FU. For the pre- and post- questionnaire comparison, all 4 areas showed significantly improvement:

The knowledge on proper BP measure was improved from 6 to 8 (p<0.01);

The knowledge on self-management of BP control improved from 6 to 9 (p < 0.01);

The knowledge on relaxation technique was improve from 4 to 8 (p < 0.01);

The knowledge on stress management was improved from 4 to 8(p<0.01).

The self-efficacy in applying the knowledge into skills was satisfactory (ranged between 7 to 8).

In 1st OT FU, the mean systolic BP and heart rate were found significantly reduced by 15 mmHg (p<0.01) after practising relaxation technique, which was within a normal systolic BP level (below 140mmHg).

In 2nd OT FU, patient will measure the BP alone without therapist guided. The mean BP shown no significantly difference between the routine clinical FU and the post relaxation BP in 1st OT FU and maintained the systolic BP below 140mmHg, which reflected that patients were able to generalize the relaxation technique into daily practice and able to reflect the actual BP in routine clinical setting.

Conclusion: Those positive results showed the new OT program was effective in enhancing stress copying skills and increasing self-efficacy in chronic disease management.

Free Paper Presentation (Residential and Community Care)

Well-being in Hong Kong Ageing Families: An Analysis of Correlates of Multidimensional Intergenerational Relationship Quality

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Background: Intergenerational relationship quality has become increasingly crucial for maintaining the well-being in ageing families due to the longer shared lifetimes between older parents and adult children. **Objectives**: Given that Hong Kong families display increasingly diverse relationships and functioning, this study aimed to systematically investigate the joint influences of parent's and adult children's characteristics from multi-sibling data sources on multidimensional intergenerational relationship quality.

Methods: The current study adopted a two-stage stratified random sampling design. The fact-to-face questionnaire survey was conducted during November 2016 to March 2017 with 1,001 Hong Kong residents aged 50 or over. Among all 1001 respondents, those with no or only one child aged 18 or above were excluded. A valid number of 612 parents with 1,745 adult children were involved for data analysis. Multilevel ordinal regression analysis was conducted to examine both children-level and parent-level correlates of intergenerational relationship quality.

Results: Results showed that parents who were female, in marriage, with higher self-perceived economic status, being a house owner and had fewer depressive symptoms tended to have higher intergenerational relationship quality. Meanwhile, better intergenerational relationships were also reported by older people whose adult children were younger, female, and in marriage.

Conclusion: The findings will contribute to improve awareness about the factors that may influence intergenerational relationships, which could inform the development of targeted services and interventions to promote family relationships and well-being.

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Experiences of the COVID-19 pandemic in care home settings in Hong Kong and Nanjing: A tale of two cities

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Purposes: To understand the strategies adopted in care home settings in response to the COVID-19 pandemic, and to identify contextual factors for developing sustainable pandemic responses.

Design: Exploratory qualitative study.

Setting and Participants: Staff members who worked for at least one month in three care homes in Hong Kong and three care homes in Nanjing between January and May 2020.

Methods: Qualitative interviews were conducted with a purposive sample of staff members in different disciplines and ranks from June to July 2020. The interviews were audio recorded and transcribed verbatim. Inductive data-driven thematic analysis according to the guidelines proposed by Braun and Clarke (2006) was conducted.

Results: A total of 20 participants, including seven personal care workers, seven nurses, two social workers, one home administrator and three home managers, were recruited. The major identified challenges to the provision of care home services during the pandemic were: how to implement measures to prevent an outbreak in the care home, how to minimize the detrimental effects of these control measures on the residents' psychosocial well-being, and how to prepare for the reopening of the care home. Three themes related to the experiences of addressing these care challenges emerged: 'libertarian paternalism versus paternalism', 'emerging versus established telecommunication' and 'selective versus blanket testing'.

Conclusions and Implications: The participants in both cities encountered similar challenges when providing care during the pandemic. However, the study findings revealed that the pandemic responses are complex interventions shaped by the social context, and thus the ways in which they addressed these challenges varied, underscoring the influence of government policies on the implementation of infection control measures, the readiness of telecommunications infrastructure and the availability to testing to prevent another wave in post-peak period.

Effects of direct and indirect intergenerational contacts on young people's attitude and prosocial behaviour towards older people

KWONG Nga Lai, Alice and Elsie YAN

Background. Available evidence supports direct intergenerational contact in promoting positive attitude of young people towards older people, thereby reducing ageism. Yet, studies investigating the interplay of direct and indirect intergenerational contacts and their associations with attitude and prosocial behaviour towards older people are scarce, especially in Chinese societies.

Purposes. The objectives of the study were to examine: (a) the relationship between attitude, prosocial intention and prosocial behaviour towards older people, (b) factors contributing to quality of intergenerational contact, and (c) the respective roles of face-to-face, extended, and vicarious intergenerational contact in influencing young people's attitudes and prosocial behaviour towards older people.

Methods. A cross-sectional study of 467 young Chinese people was conducted in Hong Kong in 2020. Participants responded to a questionnaire regarding their direct and indirect intergenerational experiences, attitude and prosocial behaviour towards older people.

Results. Young people in this study reported positive attitude, prosocial intention and prosocial behaviour towards older people. Results showed that participants who perceived higher levels of equal status in face-to-face intergenerational contact and had more phone contact with older people they knew were more likely to report higher quality of face-to-face contact with older people. For factors contributing to attitude towards older people, face-to-face intergenerational contact quality had the strongest contribution, followed by vicarious intergenerational contact and female gender. Results also found that the strengths of direct and indirect contact relationships differed in people having higher and lower levels of face-to-face contact frequency.

Implications. The study has highlighted the importance of synergistic efforts to respond to ageism in that government, schools, private settings, community groups and media all have a part to play. Intergenerational integration is the key in which policymakers and organisations of different sectors should join efforts to take an intergenerational lens to formulate new and innovative policies and implement practices at family, institutional and societal levels.

Using of a visual art intervention programme (MOLACE) to enhance holistic well-being for older people living with stroke in residential care homes: A feasibility randomised controlled trial study

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Aims: To examine the feasibility of the MOLACE visual art intervention programme for promoting holistic well-being of older people with stroke in residential care settings.

Methods: This was a two-arm randomised controlled trial for residents with chronic stroke in long-term care facilities, and conducted from 1st July 2018 to 28th February 2019. Participating homes were randomised into intervention or waitlist control groups. The sample size of 60 was the estimation. Key parameters of feasibility were examined including recruitment, retention, demand, implementation of the intervention. Two measurements were collected before, midway and after: the Caring Factor Survey (Chinese) as the quality indicator for implementation; and the Holistic Well-being Scale (Chinese) for preliminary efficacy. A generalized estimating equation statistical approach was used to evaluate the group-by-time effects on the measurements with Alpha set at p < .05.

Results: Out of 137 potential residents, 61 were recruited from fourteen residential homes giving recruitment rate at 22.58%. They were allocated to intervention groups for MOLACE (n=31) and control group (n=30). Fifty-four participants completed the 8th weekly sessions of programme, twenty-nine participants retained in intervention groups (93.55%) and twenty-five in control group (83.33%). Other key parameters on feasibility included demand looked at those residents who expressed interest but did not join with reasons non-eligible residents (46.05%); cognitive declined and/or with communicative problems (35.53%); and refused/not interested to join (18.42%). Meanwhile, implementation examined on a variety of indicators: the degree of execution showed mean duration at 112.21 minutes/session; resources/costing at HK\$639.00 per participant/programme; difficulties encountered with 55.47% decline rate before eligibility verification; and quality reflected by gradual improvement of Caring Factor Survey in intervention group plus positive feedback collected through informal interview from participants and staff. There was no significant group-by-time interaction effects on holistic well-being.

Conclusion: The MOLACE visual art intervention programme was found feasible, the preliminary efficacy on holistic well-being may need further exploration in future study.

Engaging older people with early-stage dementia or mild cognitive impairment and their family caregivers in advance care planning in community care setting: A pilot cluster randomised controlled trial

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Background: Persons with dementia and mild cognitive impairment (MCI) are at risk of losing mental capacity for making decisions for future care. Engaging them and their family members in advance care planning (ACP) earlier would be important for honouring their care wishes.

Purposes: This study aims to test the feasibility of a theory-based ACP intervention "Have a Say" (HAS) programme in older people with early-stage dementia or MCI (Global Deterioration Scale score 3-4) and their family caregivers in the community care setting in Hong Kong.

Methods: A single-blinded cluster randomised controlled trial, followed by a qualitative interview for process evaluation, was conducted in 2019–2020. Five elderly community centers were randomized to HAS programme or attention control group. Staff members of study sites were trained as ACP facilitators. The outcomes were ACP engagement level and dyadic concordance on end-of-life care preferences at baseline (T0), immediate (T1), 1-month (T2) and 3-month (T3) post-intervention.

Feasibility outcomes included recruitment and attrition rates. Acceptability was evaluated by participants' satisfaction score and semi-structured interviews.

Results: Thirty-six dyads were recruited, with a participation rate of 60%. Of the 18 dyads received the HAS programme, 16 (88.9%) completed all sessions. The attrition rates at T1, T2 and T3 were 8.3%, 16.7% and 19.4% respectively. At T1, the HAS programme reported medium effect size on ACP engagement level (Cohen's d=0.79); and on dyadic concordance on end-of-life care preferences (Cohen's d= 0.77). Participants reported high average satisfaction scores 4.4-4.5/5. Four ACP facilitators and four dyads were interviewed. Qualitative evaluation revealed the positive impact and strengths of the HAS programme; and also barriers to ACP and room for improvement.

Conclusions: Findings suggested that the HAS programme was feasible, acceptable and with preliminary short-term effects on ACP engagement level and dyadic concordance. Larger-scale trial is needed for confirming its effects.

The using pattern of audio-visual aids and cognitive decline in nursing homes

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Introduction: Visual and hearing loss are associated with cognitive decline in previous studies but the association between the use of audio-visual aids and cognitive decline is not clear yet.

Purpose: The purpose of this study is to examine the linkage between the using pattern of audio-visual aids and cognitive decline in long-term care settings.

Method: A secondary data analysis of a longitudinal study was conducted from 2005 to 2016 in 11 nursing homes. Eligibility of participant criteria aged ≥ 60 elderly who had at least 3 years residency and without severe cognitive impairment at baseline. Hong Kong version of Minimum Data Set-Resident Assessment Instrument Version 2.0 was used to measure the variables. The dependent variable was the change of cognitive performances between the first and last assessment. Independent variables included hearing aids and visual aids using frequency. Linear regression analysis was employed for testing the hypotheses. The models were adjusted for age, gender, and baseline cognitive function, dementia, diabetes, hypertension and stroke.

Results: Within the mean follow up period of 4.4 ± 0.8 years, 2,233 residents with mean age 82.1 ± 8.2 participated in the study. It was discovered that both hearing aids and visual aids are protective factors of cognitive decline, evidenced by greater decrease in mean CPS score when comparing to non-aid-fitted residents (p=0.009; p=0.042) respectively. However, occasional users of hearing aids (p=0.002) were found to have lower cognitive decline risk than participants without hearing aids as well as frequent hearing aids users.

Conclusion: Appropriate use of audio-visual aids by elderly should be encouraged in long term care setting in view of positive effects on both sensory impairment and cognitive function. Further studies with more robust designs should be conducted to validate these findings.

Social engagement level and cognitive decline in long-term care settings

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Introduction: Studies have found physical conditions and psychological well-being can impact cognitive function. In recent days, social engagement has been increasingly researched in relation to cognitive decline. However, most studies are done in community setting. It is important to remain engaged in a social context at old age, since there have been studies suggesting adequate social engagement may prevent cognitive decline.

Purpose: The aim of this study is to examine relationship between social engagement and cognitive decline in long-term care setting in Hong Kong.

Methods: Secondary data analysis was applied. Residents aged ≥ 60 who participated in Minimum Data Set-Resident Assessment Instrument (Chinese version) for at least 3 years were analyzed. The original data collection spanned from 2005 to 2016 from long-term care facilities in Hong Kong. Cognitive decline was defined by change of score in cognitive performance scale between first and last observation. Independent variable was index of social engagement, comprised of 6 questions regarding involvement in facility.

Results: 3992 subjects were in the data set. After cleaning the data set, subsequent linear regression analysis included 2,233 subjects. Mean age was 82.1 ± 8.2 . Mean index of social engagement was 1.69 ± 1.627 . Regression analysis showed that index of social engagement (b=-0.79, p<0.001) was associated with lower cognitive decline. Residents with emphysema was associated with higher cognitive decline (b=0.155, p=0.038).

Conclusion: It is especially important for elderly in long-term care facilities to remain stay socially active, manage chronic conditions such as emphysema as to maintain quality of life. The results point to potential interventions that can be beneficial to preserving cognitive function. Arranging group activities and educating elderly to manage chronic conditions may help preserve cognitive function. The results also expand current available data regarding social engagement in long-term care setting.

Effects of a culturally adapted group based Montessori based activities on engagement and affect in Chinese older people with dementia: a randomized controlled trial

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Background: A person-centred care approach has been advocated for dementia care, to respect the uniqueness of each individual. The Montessori Method, which places great emphasis on the interests, strengths and remaining abilities of persons with dementia, has been proposed as an effective non-pharmacological strategy. This project aimed to examine the effects of a culturally specific group-based Montessori Method for Dementia (MMD) programme in Chinese community dwelling older persons with dementia.

Methods: We adopted a multicentre randomized controlled trial design, embedded with focus group interviews for process evaluation. Older people with mild to moderate dementia were recruited from community centres, day-care centres and residential care homes for the elderly. They were randomized to either the experimental group to attend an 8-week MMD programme, or the control group to attend an 8-week programme with conventional activities. In the MMD programme, the included activities covered five aspects including cognitive stimulation, life skills, motor movements and fitness, sensory stimulation, and socialization. The study outcomes included engagement and affect during the activities based on observations, and agitated behaviours and caregiver stress as reported by caregivers.

Findings: A total of 100 participants completed the study. The findings showed that the experimental group exhibited significantly more constructive engagement, pleasure and interest, and less passive engagement than the control group. Qualitative interviews with the trained staff members involved in the intervention implementation suggested that the benefits of the MMD were: focusing on an individual's strength; reinforcing person- centred care; and enhancing psychosocial wellbeing. The perceived facilitating factors for the implementation were environmental preparation, flexibility in the activity design, and familiarity of the activities, whereas the barriers were the increased preparatory work and additional manpower required.

Conclusions: This project used a robust study design to evaluate the effects of a culturally specific groupbased MMD in Chinese community-dwelling older people with mild to moderate dementia. The evidence supports that the MMD is feasible and effective in increasing the level of engagement and positive affect of persons with dementia through meaningful activities and social interactions. The design of the MMD activities, which valued individual's past experiences and present abilities, highlighted the importance of person-centred care. A comprehensive assessment at the activity planning stage was pertinent for the facilitators to understand the strengths, abilities and interests of each participant. Flexibility in the content design and delivery mode of the activities supported an error-free atmosphere, which enabled the participants to gain a sense of accomplishment and self-fulfillment. The results of this project also highlighted the resource required to ensure the sustainability of MMD.

Poster Presentation

Effect of aromatherapy abdominal massage on improving constipation and quality of life (QoL) in elderlies: a systematic review

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Introduction: Constipation is a common medical problem and may negatively impact on patients' psychological health and quality of life. (Belsey J., 2010) Symptoms of constipation are extremely common; the prevalence is approximately 16% in adults overall and 33% in adults aged 60 or above. (Bharucha et al. 2013). The impact of constipation on QoL is significant and comparable with other common chronic conditions. Improving management may prove to be an effective way of improving QoL for a substantial number of patients. The aim of this paper is to find out the effectiveness of abdominal massage on improving constipation and quality of life among elderlies.

Methods: Studies were extracted from Medline, CINAHL, British nursing index and ScienceDirect for all relevant papers from 2009 to 2019 using the keywords 'constipat*', 'abdominal massage', 'aromatherapy' and 'quality of life'.

Results: Among 14 articles that we have selected, all of them focused on constipation and half of them focused on constipation in elderlies. Besides, Yıldırım, D., Can, G., & Köknel Talu, G. (2019) measured on opioid induced constipation; Lai, T.K.T. et al (2011) investigated on constipation among cancer patients and McClurg D. et al. (2011) studied about constipation among patients suffering from Multiple Sclerosis.

Five of the articles measured about the quality of life (QoL) of the subjects affected by constipation. Ozturk & Kılıc (2019), focused on the education programme to individuals suffering from primary constipation while other studies investigated on the effect of abdominal massage on constipation.

Most studies got positive result on the effect of abdominal massage. However, Kassolik K, et al. (2015) suggested massage based on tensegrity principle may have a greater positive influence on the quality and quantity of bowel movements than classical abdominal massage.

Conclusion: In sum, previous studies indicated that abdominal massage is effective in alleviating constipation. However, whether the combination of aromatherapy and abdominal massage i.e. aroma abdominal massage in Chinese population, is not clear. There is so far no published study that has compared the effect of aroma abdominal massage and plain abdominal massage in Chinese elderlies. Besides, the effectiveness on carer education on performing abdominal massage on Chinese old populations has not been studied as well. Further study can be done on these area.

Keywords: Abdominal massage, constipation, elderlies, quality of life (QoL)

Narratives of Senior Citizens: Antecedents and Consequences of Successful Aging

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Exploring the concepts of successful aging (SA) in the lenses and rich experiences of senior citizens made use of *descriptive-qualitative research design*. The senior citizens were duly selected through purposive sampling and maximum variation following these inclusion criteria: ability and willingness to express experiences, being in a state of health that allows participation in the study, perceives himself/herself as successfully aging, and 60 years and older. Guided by the philosophical framework of constructivism, epistemology and ontology, qualitative data were collected through a personal interview among the 9 consenting eligible participants using a semi-structured interview guide. The emergent qualitative data were analyzed using Braun and Clarke's Thematic Analysis Phases. The two major themes derived from the interviews are the antecedents and consequences (outcomes) of SA involves subthemes that are integral to understand SA. This understanding provided a substantial description of SA that resulted in distinguishing the positive perspective of SA thus realizing that senior citizens are valuable part of every family, community, and society. As opposed to the notion that they are needy and weak, this study showed otherwise. With this, high regard among elderly should be constantly observed to enhance the possibility towards SA.

KEYWORDS: successful aging, antecedents of successful aging, consequences of successful aging

Exploring multidimensional risk factors for burnouts in direct care workers in long-term care setting: a systematic review

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Background and Aims: Burnouts were reported in our long-term care (LTC) workforce, giving rise to an inevitable challenge in staff recruitment and retainment. Objective of this study is to identify factors associated with burnouts among direct care workers (DCW) in nursing homes. It aims to review latest researches to identify knowledge gaps in current burnout risk factors studies.

Methods: A systematic review was conducted with the PRISMA-P (2015) checklist. Burnout studies involving nurses and nursing assistants working in nursing homes or long-term care facilities outsides hospital setting were included. Only peer-reviewed, full-text and English journals from CINAHL, PubMed, PsycINFO, MEDLINE and Ovid Nursing Database were included. Eligible publications were published between January 2000 to April 2019. Selected articles were critically appraised with the Health Evidence Bulletin, Wales checklist (HEB-Wales).

Results: 12/1869 articles were initially identified according to the inclusion criteria, among which 10/12 studies (8 cross sectional, 1 longitudinal cohort and 1 case-control) were selected to generate results. Factors were synthesized according to relevant outcome measures. Five factors associated with burnout were identified: younger age, shorter employment period, exposure to responsive behaviors of residents with dementia, work stressors (role conflict, role ambiguity and work overload), and unavailability of structural resources.

Conclusion: Further investigations may be required to study the systemic effects of burnout. Independent measurement of the three domains associated with burnout, namely emotional exhaustion EE, depersonalization DP and reduced personal accomplishment PA, may be useful to generate a comprehensive picture of the risk factor effects. Minimizing burnout factors is also recommended for workforce retention within local LTC sector.

The research is part of my PhD research with the focus on the role of Christian spirituality in the practice of chaplaincy within delivery of end of life care in Hong Kong public hospitals. The methodology adopted was Interpretative Phenomenological Analysis. Eleven Hong Kong palliative chaplains from acute care hospitals were recruited to take part in individual semi-structured interviews with the researcher. The interview process was completed within the year of 2019.

"Is spiritual care "just chatting"? Conversation as an essential component of end of life care."

Caroline YIH

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End of life care, as the final stage of the healthcare continuum, is a holistic approach to the provision of medical care to the dying individual and the family. According to the WHO definition of 'palliative care', this specialized and challenging delivery of whole-person care to those at the most vulnerable margin of life focuses on four dimensions: the physical, social, psychological and spiritual dimensions of the care recipients. Traditionally, healthcare professionals are joined by spiritual care specialists, i.e. chaplains, in this holistic provision of end of life care.

Conversations are frequently observed to be used by chaplains in the practice of spiritual care in the hospital setting and this practice has often been negatively perceived by healthcare professionals. My research has revealed that the use of conversation in spiritual care intervention is undervalued as a tool for care delivery and is also a major barrier to the assimilation of chaplains into the multidisciplinary care team. This obstacle to having the full integrative collaboration of the four dimensions significantly impedes the quality of care to those at the end of their life.

In this paper, I will explore the distinctive nature of conversation used in spiritual care. I will illustrate that conversations used in chaplaincy interventions are healing in essence and different in function from everyday conversations and oral interactions used in medical encounters. I will conclude that the practice of conversation is not unproductive or irrelevant, as it has been commonly perceived, but that the use of conversation is invaluable and essential in end of life spiritual care.

Continence Nurse Clinic: Evaluation on using Foley Fixation Security Holder for patients with indwelling catheter 2020

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Introduction: Proper security of indwelling urinary catheter is important to prevent potential complications such as urethral trauma, catheter associated urinary tract infection, urethral pain, and catheter dislodgement due to accidental pulling of catheter. During patient assessment of catheter management in Continence Nurse Clinic, inadequate security method and material by using simple micropore tape or varies unqualified non-medical tape were identified. To prevent potential complications and increase patient quality care, products of Foley Security Holder (FSH)* were introduced and applied to target patients from April to August 2020, evaluation on related parameters was done.

Objective: To review pre & post subjective symptom score and objective urinary condition of patients who had received recommendation of using FSH by Continence Nurses

Methodology: Prospective study was designed with questionnaire on patient's objective and subjective data were collected before and after the FSH device was applied, information was obtained at the first consultation session and 7 to 10 days afterwards. Related information and data in Catheter Care Clinic (CCC) at United Christian Hospital from 1st April to 31st August 2020 were analyzed by SPSS version 20.0.

Results: Total 47 patients with average age 70.7 were analyzed. Average number of days with catheter insertion before a proper application of FSH in CCC was 7.7 days. Meanwhile, 12.8% (n=6) of patients were never told by medical staff about catheter anchoring fixation when they left hospital with a urethral catheter. Even the remain patients have been educated to secure the catheter, there was still 34% (n=16) of them were attending CCC eventually without any security device, the main reason was due to knowledge deficit and lack of optimal FSH products for patients. Pre & post paired-t test analyzing on skin breakdown, haematuria and urethral pain on using FSH with P-value are 0.569, 1.000 and 0.411 representatively which shown insignificant association of those parameters with FSH application. However, on parameters of preventing skin redness and leading less catheter pulling experience, significant p-value 0.047 and 0.001 were noted accordingly (P-Value < 0.05 is considered statistically significant). Overall, 87.2% of patients expressing great satisfaction on using the FSH device for catheter security and 81% of them are recommending others to use the device.

Conclusions: Continence nurses in CCC provided definite assessment and care to help patients in preventing catheter related potential complications such as urethral trauma and skin breakdown. By introduction of advance FSH products and provision of related education to patients/carers, accidental pulling of catheter could be reduced with great satisfaction could be achieved for indwelling catheter patients.

*Product of Foley Security Holder (FSH) is a device with a gel pad applying to patient's skin with a revolving motion clip on the top to hold the catheter finally avoids direct skin rubbing and pulling by catheter.

A systematic review of treatment effectiveness on computer-based cognitive training (CBCT) and virtual reality cognitive training (VRCT) for older adults with MCI – a clinical comparison

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Background: Technological advancement and enhanced education level about aging population makes more effective and evidence-based cognitive trainings demanded. Besides conventional computer-based cognitive training (CBCT), immersive virtual reality cognitive training (VRCT) is gaining popularity since last decade. This systematic review aims to assess the effectiveness on VRCT and CBCT in five specific cognitive domains [i.e. global cognitive function (GCF), memory (Mem), executive function (EF), language (Lang) and visuospatial skills (VS)] of older adults with mild cognitive impairment (MCI).

Method: Electronic databases including EMBASE, PsycInfo, Medline, PubMed and the Virtual Health Library (BVS) were used to perform literature search. 320 studies were yielded, and 18 randomized controlled trials met the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria, with 10 related to VRCT and 8 related to CBCT. Random-effect model was used in determining the main effect of cognitive training in five specific cognitive domains.

Results: VRCT provided the largest effect size on VS (d=0.60, CI=0.40 to 0.80) and Lang (d=0.60, CI=0.35 to 0.86) while the smallest on EF (d=0.16, CI=-0.07 to 0.39). CBCT provided the largest effect size on Mem (d=0.39, CI=0.05 to 0.73) and Lang (d=0.39, CI=-0.24 to 1.02) while the smallest on EF (d=0.08, CI=-0.14 to 0.30). Interestingly, VRCT and CBCT generate an opposite effect on VS (VRCT: d=0.60, CI=0.40 to 0.80; CBCT: d=-0.70, CI=-1.64 to 0.24) while CBCT tends to be more beneficial in improving Mem (CBCT: d=0.39, CI=-0.05 to 0.73; VRCT: d=0.35, CI=0.03 to 0.66).

Discussion & Conclusion: By effect sizes calculation and comparison, VRCT outweighs CBCT in treatment effectiveness of GCF, EF, Lang and VS. This can be explained by the more immersive-andinteractive experiences in VRCT helps older adults with MCI better engage in real-life experiences which supports skills generalization and reduces external distractions. CBCT tends to be more beneficial in improving Mem but no definite conclusions can be made from small Cohen's d differences. Although VRCT maybe more effective for most cognitive domains, further investigation with more stringent research design and more specific VR protocol is required to reach consensus about the optimum intervention regime.

Keywords: Mild cognitive impairment, virtual reality, computer, cognitive training, systematic review

Promoting Gerontological Education In University: Development and Evaluation of the Infusion Active Ageing Education Model

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The rapid increase in the ageing population underscores the importance of better preparing future professionals for working with older adults. The Infusion Active Ageing Education (IAAE) model was developed for promoting gerontological education and enhancing university student with ageing-related knowledge, attitude, and skills and enhancing their professional interest and competence. As an action-oriented education approach, the IAAE model encompasses 4 sequential components: (1) Identification of academic champions, who are taught the value and benefits of the approach to promote their application of ageing-related knowledge and skills in their disciplines; (2) Active infusion of related educational contents into course curricula, with gerontology experts and academic champions co-creating intergenerational and discipline-specific educational activities; (3) Activity implementation; and (4) Evaluation.

A quantitative-qualitative mixed-method approach was adopted between 2018 and 2020 to a sample of 301 students participating in IAAE activities in four academic departments of The Hong Kong Polytechnic University to evaluate the effectiveness of this approach. Students' knowledge, attitude, skills and professional interest related to ageing and working with older adults were assessed at baseline (n=220) and post-test (n=126), following a single-group pre-post design. To supplement and contextualize the quantitative findings, semi-structured in-depth interviews were conducted with 19 students and 25 older adults involved in the learning activities.

Reflections from five academic champions were also captured through informal communication and written feedback. Within-group changes among students were examined by using the paired sample t-test (n=126). After the IAAE activities, participants reported enhanced communication skills (Pre: M=6.08; Post: M=6.45; p<.001), and greater interest in working with older adults (Pre: M=26.76; Post: M=28.52; p<.01). Qualitative findings complemented these quantitative results. The model is thus a viable approach to promoting gerontological education in University.

The usefulness and user experience of an electronic pain management programme for working population

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Purposes: To evaluate the usefulness and collect the user experience from the participants of an electronic pain management programme (ePain) at two process evaluations. ePain is designed for pain management in working population with chronic pain.

Methods: The intervention group participants received an electronic questionnaire at two process evaluation time points. Items regarding to the usefulness, including whether ePain can help increasing pain knowledge, formulating their own pain management plan and relieving their pain were asked. For the user experience, the participants replied on the level of understanding to the contents, the design of ePain and satisfactory level. A 7-point Likert scale rated from one (absolutely disagree) to seven (absolutely agree) was adopted. The participants provided feedbacks to their experience in ePain.

Sample size: A total of 107 participants were invited to complete an electronic questionnaire, with 65 participants from first process evaluation and 42 participants from second process evaluation.

Year: The data were collected from February 2019 to January 2020. The analysis was conducted in February 2020.

Results of the study: Forty one participants at first process evaluation and 42 participants at second process evaluation returned the questionnaire. They were satisfied with the usefulness of ePain in terms of enhancing pain knowledge, formulating pain management plan and pain relief. Satisfactory ratings were received about the contents, design and user experience. The scores ranged from 4.36 to 4.59. They reported learning the self-management of pain, but too busy to finish the contents. Also, the outcome measurement questionnaire was too long for them and its font size could be larger. To conclude, the participants presented positive usefulness and user experience with ePain. They are our future aging population. Their experiences and suggestions should be taken into considerations when developing new health education and promotion platforms for older adults.

Overcrowding and Overloading in 365 Days! Strategies for Preventing Medication Administration Error in an Acute Geriatric Ward: Two Years Review

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Background: Safe and accurate medication administration is one of the core responsibilities and missions in nursing care. However, tremendous workload, jam-packed clinical environment and increasing proportion of inexperienced staff posed great challenges to uphold the standard in an acute geriatric ward in United Christian Hospital (UCH). Thus, preventive measures had been implemented to minimize the risk of Medication Administration Incident (MAI) in this persistently unpleasant working environment.

Methodology:

1. <u>Applying Authentic Leadership:</u>

Supervised with Authentic leadership is a crucial on improving medication safety. Creation of supportive culture and enhancement of nurses' creativity, motivation and ethical behavior were focused. Nurses especially the juniors would proactively speak up new ideas related to medication safety and ask for clarification while facing the unfamiliar medications or situations.

2. Ensuring Good Compliance on Administration of Medication (AOM) Guidelines:

Even when using the In-patient Medication Order Entry (IPMOE) System for medication administration, a strong mindset of over-looking the whole drug profile of each patient according to the "Five-Right" principle was built in nurses especially the new comers. Regular on-site supervision, monitoring and audit were performed to ensure good compliance on AOM guideline.

- 3. Minimizing Distractions and Interruptions during Medication Round:
- Avoidance of medication round during visiting hours was initiated to minimize distractions and interruptions by relatives. For dangerous drug checking, not only a quiet location with extra lighting support was set up but also a good practice of "Pointing and Calling" was applied during high-risk medications checking.
- 4. <u>Consolidating Nurses' Pharmacological Knowledge:</u>

Interactive educational talks on medication for the elderly comprising side effects, polypharmacy and medical interactions were held quarterly to ensure nurses' competencies on pharmacological knowledge.

Result: After the implementation of the strategies in the past two years, there was only one MAI occurred in Ward 11B compared with 46 MAIs in M&G department between OCT 2017 and SEP 2019.

"Manage your pain"- Chronic Pain Self-Management Day Program in community for older adults

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Purposes: Chronic pain is common in general population of Hong Kong. Studies showed that the overall prevalence of chronic pain among adults was 35% and the prevalence of pain would increase with age. By 2041, it is estimated that nearly one- third of the Hong Kong population will be aged 65 years or older, indicate that percentage of chronic pain suffers in the old age group is likely to increase in future years.

In community settings, there are different multimodal interventions to help people suffer from pain, but it lacks a systematic and evidence-based non-pharmacological interventions.

This study is to describe experience with a self-management pain program, using cognitive-behavioral therapy and exercises, in a community setting. The Day Program aims to equip older adults with pain management knowledge and skills so as to increase their coping strategies and self-efficacy in managing their pain, thus promoting their quality of life.

Methods: Total 60 participants aged 55 years or above, have been suffered from pain for more than 3 months were recruited from community using self-referral method from 2016 to 2019. The Day Program consisted of 13.5 day structured (9:30am- 3:30 pm) on twice weekly basis for 7 weeks. It includes pain education, cognitive re-conceptualization, training in communication skills and coping strategies, graded physical exercises and functional activities training. A group of 10 participants was run by social worker, physiotherapist and occupational therapist.

Results: Completed datasets from 45 out of 60 participants who attended our program are reported. Assessments were conducted at baseline and immediately post-intervention. Outcome measures included Chronic Pain Acceptance Questionnaire and the Pain Self-Management Checklist. The pre- to post-assessment results on self- report measures indicated significantly improvement on measures of unhelpful pain beliefs and acceptance on pain (P < 0.001).

The initial result of our Day Program shows that participants are more willing to accept pain, to have better physical and emotional functioning and thus engaging in meaningful activities. The Day Program can increase the self-efficacy of older adults in leading an active lifestyle with chronic pain.

Development of an educational program for middle- and older-age hypertensive adults in the community

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Background: Hypertension (HTN) was ranked as the first leading risk factor of global disease burden and was estimated to cause 10 million deaths every year. Although more hypertensive adults aged 45 or above were being treated, the rate of achieving controlled blood pressure was in a decreasing trend. While the rate of mobile phone ownership was as high as 94% in advanced economies, a new program should integrate mhealth component to fulfill the needs of HTN management among aged 45 or above hypertensive adults.

Purposes: To develop a validated educational program for hypertensive adults aged 45 or above in the community.

Methods: The structure of the educational program has been guided by Pender's health promotion model and integrative review. The reviews of the use of mhealth on HTN management in recent studies was reviewed to identify effective way to deliver the program to the targeted participants. The educational content was adopted and modified from international HTN educational manual in Macau context. A multi-disciplinary expert panel of five members was formed to validate the program in the dimensions of relevance, appropriateness, and feasibility.

Results: The educational program consisted of three parts, health education, leaflet and text messaging, which covered the content of mediation, blood pressure monitoring, and lifestyle modifications. The overall content validity index was 0.85, which indicated the content of the program was good for the targeted hypertensive adults. By summarizing the reviewed studies, text messaging was chosen as the reinforcement strategy after health education because of its convenience to use and required least resource.

Backward walk test: a reliable and valid tool to assess gait and balance in older adults with dementia

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Background and Purpose: The backward walk test (BWT) has been used to evaluate the balance, gait and fall risk for older adults, but its psychometric properties in older adults with dementia have not been investigated. This study aims at examining the test-retest and inter-rater reliability, construct and known-group validity, and absolute and relative minimal detectable changes at the 95% level of confidence (MDC₉₅) of the BWT in older adults with dementia.

Methods: This study was a cross-sectional study with repeated measures. Older adults with a mean age of 83.3 years and a diagnosis of dementia who were able to walk backward independently for at least 3 meters were recruited from day care and residential care units. The BWT was conducted on three separate testing occasions within two weeks under two independent raters using a modified progressive cueing system. The 10-meter walk test (10MWT), Berg Balance Scale (BBS), and Timed Up and Go Test (TUG) were used to assess the gait, balance and mobility performances of the participants.

Sample Size: 30

Year of Study: 2019

Results and Discussion: The BWT had excellent test-retest reliability [intra-class correlation coefficient (ICC) = 0.96] and inter-rater reliability (ICC = 0.97–0.97) in the participants. Moderate correlations between the BWT and BBS [Spearman's rho (ρ) = 0.60], and strong correlations between the BWT and 10MWT (ρ = 0.84) and TUG (ρ = -0.82) were found. The BWT could distinguish between the participants who ambulated with walking aids and those who did not (p < 0.001). The participants who had experienced a fall in the past year did not differ significantly in the BWT compared with those who had not fallen (p = 0.13). The absolute and relative MDC₉₅ of the BWT in the participants were 0.10 m/s and 39.3%, respectively.

Conclusions: The BWT is reliable and valid in assessing balance and gait performances in older adults with dementia. Further investigation is needed to determine whether the BWT can identify those with an increased risk of falls.

Person Centred Care Approach for Elders with Dementia

WONG Chi Kin, MAN Kin Ting Hong Kong Society for the Aged

Background: The Hong Kong Society for the Aged (SAGE) has been applying Dementia Care Mapping (DCMTM) for realizing person centred care (PCC) since 2010 in 9 Residential Care Homes and 4 Day Care Centres for the Elderly. PCC is not only important in cultivating the care culture; it is also fundamental in case management for improving elders' quality of life.

The Montessori Methods for Dementia (DMM) is also applied as one of the approaches to address PCC for the elderly by qualified practitioners. This method focuses on identifying elder's needs, interests, skills and abilities by completing a comprehensive assessment, therefore it enables staff to devise an individualized training plan and prepare a supportive environment for the elders with dementia.

In November 2015, we had first conducted a large scale in-service training to share the DMM among therapists, nurses and social workers including unit-in-charges. In late 2017, we applied PDCA (Plan, Do, Check, Act) method and launch a pilot programme of DMM in three phases in a home for the elderly of SAGE.

Plan & Do: In phase one, a multi-disciplinary working group had been set up to decide how to improve the environment and facilities in the elderly home in accordance with the DMM principles and provide intensive training to all staff. In stage two, five residents with dementia were selected for comprehensive assessments and implemented DMM treatment programmes.

Check: In phase three, the results of the intervention and analysis of the effectiveness were measured by DCM which is the most powerful and authoritative tool. The results of the programme have been proved remarkable, two subjects improved their mood and engagement level. It was evaluated that the elders became more independent with positive engagement and emotion while participating in daily activities. Also, it was effective in dealing with some responsive behaviours.

Act: In conclusion, a multi-disciplinary participation is essential for PCC, both the excellent macro caring culture and tailored-made micro treatment approach should be developed with evidence-based practice simultaneously. SAGE will put forward such approach in all the 9 homes for the elderly and 4 day care centres.

Making a happy and health aging: being a volunteer

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Purpose: With populations continuing to age, prevalence rates for chronic illnesses and pain situations are expected to increase. The present study aims to explore the peer volunteers experience in leading a pain management program.

Recruitment and Training of Peer volunteers: Peer volunteers (PVs) were recruited from Institute of Active Aging hosted by the Faculty of Health and Social Sciences of the Hong Kong Polytechnic University. They were mostly retired and were willing to volunteer their time to contribute to the community. Topics for the training workshops were: discuss what a peer is; communication skills; client safety and confidentiality; managing crises and emergencies; motivational strategies to enhance the compliance of the clients; demonstrations on the use of the teaching manual and various non-pharmacological practices.

Year: The data were collected from July 2018 to January 2020. The analysis was conducted in February 2020.

Results of the study: A total of 113 peer volunteers were recruited and trained. Among them, were 74% females (age of 61.0 ± 5.1). The majority were married, possessed a university degree, and had a technical job. Almost all of the PVs had previous voluntary experience. Upon completion of training, they led a 12 week Pain Management Program for older adults living in nursing homes.

Comments and feedback were collected from PVs and organized as categories: meaningful, helping themselves & helping others, boosted my self-worth, barriers encountered upon the completion of leading the Pain Management Program

PVs described leading the Pain Management Program as a meaningful experiences. "I was appreciated by nursing home residents" . "Nursing home residents were touched and said that they never expected us to be so nice to them"

Perceived benefits: helping themselves & helping others: "My pain is gone after volunteering in the program"; "I feel happy by helping others"; "I can see that the participants are happier and feel less lonely" Boosted my sense of self-worth: "My family and friends recognized my achievement and were proud that I was a volunteer"; "I get satisfaction in giving something back to the society and providing support to the participants"

Barriers encountered in leading the Pain Management Program:" The space in the nursing home is limited, so we had to work things out with the nursing home in-charge"; 'Some nursing home residents were too frail and required more assistance'

Burden of informal caregivers for older persons with chronic pain: Cross sectional study

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Caregivers experienced senses of depression and helplessness that induced their burden and imposed extra challenge during the caregiving. These feelings put caregivers' mental and physical well-being at risk.

Aim of the present study was to explore the caregiver burden of informal caregivers who are taking care of older persons with chronic pain. There were 140 caregivers (77 females, 63 males), with the mean age of $34.8 (\pm 9.05)$ joined the study.

Results: Caregiver burden were measured by Caregiver Burden Inventory (CBI), and caregiver psychological status was measured by The Depression, Anxiety and Stress Scale - 21 Items (DASS-21). Mean score of CBI and DASS was 26.75 (\pm 6.228) and 36.73 (\pm 18.398) respectively. About 50% of caregivers reported bad sleeping pattern. The mean pain score of caregivers was 2.34 (\pm 2.995), and positively associated with their psychological condition (p < 0.026).

All caregivers reported that older persons they are taking care of have chronic illness. The pain level of the older person 2.34 (\pm 2.995) and positively associated with the CBI.

Discussion: the caregiver burden is lower than similar studies in Canada and US. Yet, actions are needed to relief the burden and pain among caregivers.

Relationship between lighting exposure and behaviours in activities of daily living in elders with Dementia residing in old age homes in Hong Kong

Alice Tsang

Elite Resource & Consultation Services

Disrupted circadian rhythm is considered to be one of the contributing factors of sleep disturbance and BPSD in persons with dementia. Effect of light exposure on circadian rhythm has been well documented. It is hypothesized that there is a structural relationship of various aspects of light and behaviours of daily living. This study concentrates on persons with dementia living in elderly homes ("homes").

This is a cross-sectional study at a single time point for 24 hours involving measurements of light exposure and activity level. Persons with dementia were evaluated on their cognitive ability, mood and subjective QOL. Care-givers provided further information on participants' behavior, sleep quality and BPSD, and observed QOL.

The study was conducted between February to October 2019 on a sample size of 41 persons with dementia, aged 65 and above, residing in 7 old age homes. Gender was 18 male and 23 female. Mean age was 68.2 (youngest aged 65 and oldest aged 103). Of the condition of dementia, 17% were Alzheimer's Disease and 10% vascular dementia. Comorbidities included high blood pressure, diabetes, hyperlipidaemia, cardiac diseases and stroke.

Lighting measurements of lux and Kelvin of the homes yielded highest value for time period between 12 noon and 6pm. However, this was much lower than the 1000 lux quoted in various literature and the color temperature was in the range of "cool white", and not for "daytime". Of the six homes with multiple subjects, light measurements taken on the same day had yielded marked variation.

Pearson correlation indicates that moderate correlation between Kelvin at night (6pm to 12 midnight) and MoCA result, Lux in particular lux in the morning (6am to 12 noon) and sleep, as well as sleep with movement and NPI. Stepwise linear regression indicated that Lux at noon to 6pm could be a predictor of sleep problems and sleep score.

Findings in this study may be useful for modification of environment and scheduling of old age homes for improved behavior and sleep of their residents.

Pilot Enhancement Program for patients' problem of constipation in Acute Geriatric Ward, UCH

Ho Kwan Wai Evan, Chan San Wong, Aaron, Tai Kam Kwan UCH M&G Ward 11B

Background: In literature reviews, constipation has shown to be a fall risk in elderly group patients, the underlying cause of acute retention of urine and delirium. The prevalence of constipation is also high (H.Y., Pi, et al., 2016) (E.J. Gower, M.O. Gatewood & C.S. Kang, 2012) (Department of Health, 2014). Implanting early screening tools can tackle the underlying cause of admission diagnosis; in term of shortening the length of hospitalization for patients. As a result, resources used for prolonged hospital stay can be reduce. A pilot enhancement program for patients with constipation problem is setup.

Practice Gap: In my working unit, nurses are having too much focus in patients' acute medical problem. Second, nurses fail to alert doctors that patient has problem of constipation upon admission. Thirdly, nurses have failed to interpret the data of BO in the fluid balance chart / temperature chart from the patients. In a statistic done from 14/11/2019 - 8/12/2019, in total 25 days, there were 106 patients identified with no bowel open since admission, comparing with the total in-patient number, it was 7.8% (Appendix 1). Indeed, there were 11 patients found untreated constipation with more than 3 days.

Objective: A pilot enhancement program for patients' constipation problem is set up with three objectives. Firstly, to have early detection of constipation. Second, to promote overall well-being of patient and decrease patients' length of stay in hospital. Thirdly, to screen for underlying cause of admission secondary to constipation.

Method: The program is set up with two parts: Early Screening and Education. In early screening, a sentence for asking, "whether patient has bowel open in recent three days", is added under the FTOCC screening paragraph. The sentence can facilitate nurse to have early screening for patients' constipation problem and inform doctors promptly. In education, nurses were invited to join a lecture with topics of constipation. Pre-and post- tests have done to test nurses' knowledge for constipation related topics.

Result: The number of patients of constipation has dropped from 106 patients to 25 patients, which is around 75% in reduction (Appendix II). On the other hand, nurses' knowledge towards topic of constipation has 60.1% improvement (Appendix III).

Conclusion: Constipation is easily under-estimated and worth to address. The program can have early detection of constipation and increase nurses' alertness towards patients' constipation problem.

Reference List:

Department of Health (2014). *Constipation - Find the way out*. Retrieved from HKSAR, Department of Health Web site: https://www.chp.gov.hk/files/pdf/ncd watch mar2014.pdf

Gower, E. J., Gatewood, M. O. & Kang, C. S. (2012). Emergency Department Management of Delirium in the Elderly. *West J Emerg Med*, *13* (2), 194-201.

Pi, H. Y. (2016). Risk Factors for In-Hospital Complications of Fall-Related Fractures among Older Chinese: A Retrospective Study. *BioMed Research International, 2016*.

Effects of dance intervention on agitation for people living with dementia: A systematic review

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Background: Dementia is common and prevalent due to the ageing population. Agitation and impaired cognitive functioning were common problems that require medicine, individual care and attention. The nonpharmacological intervention has been increasingly recognized to support dementia clients. However, more evidence is needed.

Aim: To investigate the effects of dancing intervention on agitation for people living with dementia.

Methods: Medline, CINAHL, SPORTDiscuss, PsycINFO and Cochrane databases were searched for eligible studies on dancing intervention on people living with dementia published between 2002 and 2020. PEDro were used to assess the quality of the eligible studies. Standard deviation and post mean values were extracted. A within-group Hedges g was computed for individual studies.

Results: Two randomized controlled trials recruiting 183 participants were included with satisfactory quality. The outcome of the analyses revealed a significant improvement in agitation reduction with the effect sizes of 0.5 (post-intervention) and 0.8 at follow-up.

Conclusion: This systematic review generates evidence of the effects of dancing intervention on agitation for people living with dementia. It is recommended to incorporate dancing intervention as a nonpharmacological intervention or strategy to reduce agitation of people with dementia living in elderly homes or non-acute clinical settings.

Keywords: Dancing intervention; Dementia; and Agitation.

Using the Hong Kong Brief Cognitive Test (HKBC) as Predictor to Discriminate Discharge Destination for Patients with Stroke in Rehabilitation Setting

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[1]Occupational Therapy Department, Princess Margaret Hospital,

[2] Department of Medicine and Geriatrics, Princess Margaret Hospital Background

Post-stroke cognitive impairment is very common (Sun, Tan & Yu, 2014). To assess cognitive performance, Occupational Therapists use various standardized cognitive assessment tools. However, both MMSE and HK-MoCA have their limitations that restrict the clinical application (Chiu et al., 2018). Therefore, the HKBC was developed and validated by CUHK (Chiu et al., 2018) for local patients, especially patients with low educational level.

Purpose: By using HKBC in this research, it is hoped that the discharge destination of patient with stroke can be predicted in early stage of in-patient rehabilitation. Therefore, the multi-disciplinary team can prioritize patients for early discharge planning according to the cut-off. At the same time, Occupational Therapist can provide specific interventions to facilitate the patient to return home and re-integrate into Community. As HKBC is a relatively new and localized cognitive assessment tool, this is a pioneering study to discriminate home discharge destination by using HKBC after stroke.

Method: This research was approved by Kowloon West Cluster Research Ethics Committee (KWC-REC). HKBC data was collected from patient database retrospectively since January 2020. All patients referred to Occupational Therapy Department with diagnosis of Stroke were included. However, patients who were premorbid diagnosed with Dementia or Alzheimer's disease, or not able to conduct cognitive assessment were excluded in the study. Patients were divided into two groups according to availability of full time caregiver. HKBC was conducted within 7-30 days after stroke. A total of 56 subjects were recruited finally in the study.

Result: For patients with stroke and without full time caregiver, the optimal cut off point of HKBC in discriminating home discharge was 11.0000 with area under curve (AUC) at 0.9907. On the other hand, for patients with stroke and with full time caregiver, the optimal cut off point of HKBC in discriminating home discharge was 5.0000 with AUC at 0.9853.

This study confirmed the highly correlated association of cognitive functioning with discharge destination in patients with stroke, which is consistent with numerous studies conducted previously (Geubbels, Nusselein, VanHeugten, Valentijn & Rasquin, 2015; Van DerZwaluw, Valentijn, Nieuwenhuis-Mark, Rasquin & VanHeugten, 2011). Specifically, it also ascertained that HKBC is a good cognitive assessment tool to discriminate home discharge destinations for patients after stroke.

Conclusion: To conclude, for rehabilitation hospitals, the cut off points resulted from this study can be referenced to facilitate early discharge of patients with stroke by Occupational Therapists and even by multidisciplinary team. In practice, to take it simple and be conservative, despite the availability of full time care giver, HKBC at 11.0 may be referenced as a cut off point in home discharge for patients suffering from stroke.

A new regimen for elderly rehabilitation: treatment effects of multidisciplinary outreach health services in private and self-financing RCHEs in Hong Kong

CHAN Mei Yuet, CHAN Kin Tung, CHENG Yee Wa, CHUI Wai Yin, TONG Tik Sang HKSKH Pilot Scheme on Multi-disciplinary outreaching Support Team for the elderly (Kowloon Central Cluster & Kowloon East Cluster)

Purposes: To evaluate the impacts of a new rehabilitation model with a multidisciplinary outreach team including physiotherapists (PT), occupational therapists (OT), and speech therapists (ST), for elderly in old aged home in Hong Kong.

Methods: 1166 elderly who have applied for the service operated by Multidisciplinary Outreach Support Team for Elderly (Kowloon Centre Cluster) (MOSTE (KC)), Hong Kong Sheng Kung Hui Welfare Council, were assessed and recruited for the study. On-site assessments and treatments including motor training and pain management (PT); cognitive training and training for activities of daily living (ADLs) (OT); swallowing training, oral motor training and communication training (ST) were provided by a team of therapists on regular basis throughout the year. Pre-post analysis of treatment outcomes of PT (Elderly Mobility Scale (EMS), Berg Balance Scale (BBS) & Numerical Pain Rating Scale (NPRS)), OT (Modified Barthel Index (MBI) & HK-MoCA 5min) and ST (Functional Oral Intake Scale (FOIS), Treatment Outcome Measure (TOM, Dysphagia Impairment) and Treatment Outcome Measure (TOM, Aphasia Impairment)) were conducted upon the completion of treatment.

Sample Size: 1166 Elderly (average age: 82.1), (498 Males, 668 Females), from 129 RCHEs

Year: April 2019 – March 2020 (financial year 2019-2020)

Results: 8 out of 8 treatment outcomes showed significant improvement after the participants have received the outreach rehabilitation service including reduction in pain level, improvement in general mobility, abilities for ADLs, swallowing ability and also change in diet level for dysphagia management. Further studies can be carried out to include the impact of social activities provided in the program organized by social workers on one's mental health status such as stress level and overall quality of life (QoL) which is another dimension and focus for elderly health services.

Local Innovation Sandbox: A Platform for Gerontology Students and Alumni

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Background: Hong Kong surpassed its Asian neighbour and becoming the top country with the longest expectancy around the globe. In 2024, it is projected that more than 21% of Hong Kong's total population will be aged 65 or above, moving towards a super-aged society. While we were aspiring a longer life, population ageing also pose grand challenges as well as opportunities for a sustainable future. In order to turn knowledge into action, ideas into real models, and theories into innovations, Sau Po Centre on Ageing at The University of Hong Kong took the lead in August 2020 to set up the FutureLab@hku ("FutureLab").

Methods: Aiming to create an environment where unconventional and out-of-classroom approaches to addressing social innovation, an online virtual FutureLab has been devised. The FutureLab accepts participants who are alumni and current students under Master of Social Sciences (Gerontology) at The University of Hong Kong, the whole season consisted of five sessions. Participants were required to complete a pre-session exercise to lay down their expectations of the FutureLab as well as their perceptions on population ageing. In the first session, they were guided to think of core values and areas of interests in the gerontology field, they were then divided into groups based on their common interests to create synergy. Participants developed their ideas and gave pitching presentations. The last session reserved as an evaluation of the FutureLab and provide routes for participants to realise their ideas.

Results: A total of eight participants joined the first season in August 2020. By utilising a virtual FutureLab, participants could join easily and engaged via various online tools. We acknowledge that a sandbox is important to provide an innovative environment for alumni and students to realise their goals, most importantly to contribute their knowledge and pursuing meanings in life.

The impact of Visual Art Promotion Project in Wong Tai Sin District

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Visual Art Tutor Training Project has been launched in Wong Tai Sin District for 17 years. Normally there are 2 modules, one is on visual art skill and teaching skill training; the other is practicum on art tutoring for the needy. In 2018, The H.K.S.K.H Wong Tai Sin District Elderly Community Centre commissioned Professor Eric WH Chui of City U to conduct an impact assessment of the Project.

The study period was from Nov 2018 to July 2019. 118 subjects were recruited while 47 trainees of the project were in the intervention group, 71 general members were assigned to control group. The assessment was conducted by pre- and post- self-administration questionnaire which assessed 5 perspectives: (1) motivation in learning art, (2) art efficacy, (3) efficacy of art tutoring, (4) intrinsic motivation to volunteer, and (5) involvement in volunteer services.

The study findings showed significant effect in enhancing trainees' motivation in learning art, efficacy of art tutoring, intrinsic motivation to volunteer and involvement in volunteer services.

In view of life-long development and results of this impact assessment, "development of expertise / healthy interest" and "volunteer participation" may enhance self-esteem, sense of achievement and leads to healthy aging.

Self-administered Acupressure for Knee Osteoarthritis in Middle- and Older-Aged Adults: A Preliminary Analysis of Randomized Controlled Trial

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Objectives: To evaluate the short- and medium-term effectiveness of self-administered acupressure taught by a short training course on reducing knee osteoarthritis (OA) pain in middle-aged and older adults.

Design and subjects: This is a randomized controlled trial (RCT) comparing self-administered acupressure training knee health education (KHE) on subjects with knee OA at week 4 (short-term) and 12 (medium-term). The RCT aimed to recruit 314 participants and is still ongoing. The first 70 participants who had completed the study were analyzed.

Interventions: Participants in the self-administered acupressure will attend two 2-hour training sessions (1 week apart) to learn self-administered acupressure and practice twice daily for 12 weeks. Participants in the control group will receive knee health education of the same schedule and duration. Main outcome measures: The primary outcome measure is the Numerical rating scale (NRS) for pain score at 12 weeks. Other outcomes include Western Ontario and McMaster University Osteoarthritis Index, Short Form Six Dimensions, Timed Up & Go Test, Fast Gait Speed, pain medication usage. Compliance of self-administered acupressure was evaluated using a daily record logbook.

Results: Participants in both groups (35 in each group) showed a trend of decrease in NRS score from baseline to week 12. NRS of self-administered acupressure group decreased from 4.7 at baseline to 3.2 at week 12, while KHE group decreased from 5.0 at baseline to 3.9 at week 12 (between-group mead difference = 0.7). Similar trends of improvement were observed in other outcome measures. The preliminary analyses did not reveal any significant differences at this stage.

Conclusion: The two 2-hour training sessions of self-administered acupressure and KHE are feasible and acceptable to the participants. Trends of improvement were observed in both self-administered acupressure and KHE groups. A complete-sample is needed to determine the differences between the two groups.

Use of technology in community networking among seniors

HO Hin Yi

H.K.S.K.H. Chuk Yuen Canon Martin District Elderly Community Centre

COVID-19 leads elderly services to a new normal, from face-to-face to an online one by using technology. Wong Tai Sin is one of the seriously affected district in this epidemic. Meanwhile, elderly in the community is at high risk being infected. Hence, elders are highly recommended to avoid social gatherings and stay at home. Being physically isolated brought them boredom and loneliness. Anxious mood also appeared when they found themselves lacking disinfectant items at the same time watching TV news repeatedly reporting the influence of COVID-19. Elders' routine schedule being broken also led to depressive mood.

Under this circumstance, the H.K.S.K.H. Chuk Yuen Canon Martin District Elderly Community Centre('the Centre') made some trial on facilitating seniors' social networking by the use of technology.

- 1. To make good use of social media, monthly Facebook live meetings with elders are held to keep elders connected with the centre and to get the update information. At the same time, diverse Zoom groups and talks are started to facilitate elders communicating with each another online, doing physical exercise together and even having lessons like drawing and Mindful training. Being physically separated but networked online made elders feeling excited, satisfied and more connected to the world.
- 2. To collaborate with colleges and NGOs, matching youth and elders in pairs to start weekly video-call. In the calls, youth showed their care on elders at the same time elders shared their live stories and the decoration of their units to the youth. Online social network was built between them and this in a certain extend put the elders' loneliness and boredom aside.
- 3. To expand the coverage of online community network, small groups of elders are invited to the centre physically, teaching them using smartphone applications. Apps-learning video and handouts are made and wildly spread to them. This helped them learning to use online tools themselves and many elders get connected through this.

Approximately 500 elderly are included in this study from Feb to Sept 2020. From the feedback of the elders, it is obvious that the above methods has successfully promoted social connection and strengthened the community network in an online mode.

Intervention to improve navigation performance in people with dementia: a scoping review

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Objectives: To investigate the approaches, methods and effects of interventions to improve spatial navigation performance in people with dementia, and identify the frame of reference in the treatment approaches using a scoping review.

Methods: A scoping review of published studies in English from the year of 2010 to 2020 was performed from 5 electronic databases - PubMed, Medline, PsycInfo, EMbase and Web of Science with he following search keywords: "Navigation", "Route finding", "Way finding" and "Intervention", "Exercise", "Training", "Practice", "Assistive technology", "Cognitive training", "Cognitive intervention", "Cognitive rehabilitation" and "Dementia", "Alzheimer". Manual search of reference lists on relevant articles were also performed to identify potential studies. Titles and abstracts were further screened according to exclusion criteria: animal/non-human studies, non-English, non-review/ meta-analysis/ systematic review, irrelevant intervention, and non-dementia subjects.

Results: One hundred and thirty-four full-text articles were screened, 82 of them were duplicated and removed. Seven articles including one randomized controlled trial, one single subject design and five quasi experimental designs were recruited for the scoping review. Concerning the types of intervention used, 3 studies used advanced techniques such as computer games for navigation training; 2 studies investigated the effectiveness of using assistive devices to improve way-finding; 1 study was concerned with medical treatment; and 1 study was related to environmental adaptation.

Conclusion: A mix of diversified navigation training modalities was found in the current review. It is suggested that a blended approach would yield maximal training benefits.

The effectiveness of app-based mobile intervention on promoting healthy lifestyle in older adults: a systematic review

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Background: App-based mobile intervention (ABMI) delivered with behavior change techniques (BCTs) is effective in guiding the young adults to improve their healthy-related behavior. However, its effectiveness for older adults is undetermined. This paper aims to evaluate the effectiveness of ABMI for health promotion and to explore the adaptation of different BCTs in the ABMI.

Methods: This paper will conduct a systematic review involving search on PubMed, CINAHL, The Cochrane Library, Scopus, Medline, EMBASE, PsycINFO, Web of Science and ScienceDirect. from 2008 to 2020. Inclusion criteria are older adults with aged \geq 55, applications that designed for promoting healthy-related behaviors (diet, quality of sleep and psychosocial health), RCT and cluster RCT study design and published in English.

Results: Out of 6263 identified studies, 4 were included in the review and 1 additional study was added through hand searching of other sources (e.g. Google Scholar). Among the 5 eligible studies, three were about diet and the other two were about psychosocial health and cognition function (693 participants, 72.3% female, mean age 59.91 years). The duration of the intervention ranged from 8 weeks to 18 months. The functions of ABMI included sending messages, monitoring weight and energy intake, delivering knowledge-based videos and providing memory training tasks for the participants. The result showed the ABMI are effective in enhancing healthy related behavior which included 1) decrease intake in both saturated fat intake and sugar-sweetened beverage consumption leading to reduced BMI, hip circumference; 2) decreasing the loneliness level, isolation, depression and anxiety; 3) improved cognitive function. The most frequently used BCT was instructions on how to perform behavior.

Discussion/ Conclusion: The findings of this systematic review supported the effect of ABMI in promoting diet modification and psychosocial health. Most of the paper show significant differences between intervention group and control group. However, the effectiveness of ABMI on older adults' sleep quality is unknown because no relevant academic journals was identified. More studies are still needed to strengthen the credibility and validity of the effectiveness of ABMI on healthy-related behavior among older people. This review gives an insight to health professionals that ABMI can facilitate the older adults to achieve healthy lifestyles in order to improve quality of life.

Visiting Medical Practitioner Service (VMPS): The Barriers and facilitators of service implementation

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Background & Aims: Visiting Medical Practitioner Service (VMPS) was launched in October 2018 to provide medical service to the residential home. The objective of this study is to identify the barriers and the facilitators on the service implementation to improve the current service model aiming to deliver a better service.

Methods: This is a qualitative study using a semi-structured interview for data collection. Participants consist of 1 service operator, 2 medical practitioners and 8 RCHE staffs who were responsible to run the service in Sham Shui Po or Kowloon East District. Data collection was conducted from January to May 2020. Thematic analysis by an inductive approach was used for data analysis.

Results: Qualitative analysis reviewed the facilitators can be categorized into systemic, operational and communicational. Systemic facilitators were related to policy and service design. Operational facilitators focused on the procedure and the service assessment standard. Communication facilitators involved communication platform, understanding of the service and between stakeholders, and feedback. Barriers can break into operational, communication and perceptual barriers. Operational barriers are increased workload, manpower and time constraints and unfamiliar service operation. Communication barriers were about discrepancies in information sharing and understanding. Perceptual barriers exist towards the service design and the scope of service.

Conclusion: VMPS provide medical service to RCHE's resident to improve their general health and reduce the reliance on public healthcare. Stakeholders providing the service should embrace the facilitators and solve the barriers by modification in operation, change in service model and policy change.

Actions taken for Infection Control in Residential Care Homes for the Elderly in Kowloon East Cluster during the Outbreak of COVID-19 Pandemic

WONG Lok Yan

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Backgrounds: COVID-19 outbreak in the early July has sparked concern on the safety of the private residential care homes for the elderly (RCHEs) since there were increased number of locally confirmed cases and raised number of death.

Objectives: The objective of this study is to consolidate the action taken for infection control during the COVID-19 pandemic in the RCHEs and explore future direction to enhance infection control measures in the elderly homes.

Methods: The research separated into two parts, (1) document review and (2) interview. Document review focused on government documents. Content analysis was conducted to process and consolidate the data from the document and interview. Researcher interviewed Visiting Medical Practitioner Service (VMPS) team focusing on infection control in RCHEs and thematic analysis was conducted to formulate themes from the interview.

Results: Actions taken by the government include composing infection control guidelines, letters and leaflets, Anti-viral Spray Subsidy Scheme, Targeted Group Testing Scheme, and strengthen infection control measures through VMPS. VMPS team is continuously providing free medical visitation service to RCHEs during the pandemic, emphasizing and educating RCHE's staff on infection control. Through the training, VMPS pin-pointed the infection control problems in RCHEs and received positive feedbacks from RCHEs.

Conclusion: During the COVID-19 pandemic, government and the Kowloon East VMPS team has implemented a range of infection control actions. The future way of COVID-19 prevention is through education by tackling the health belief and regular viral testing at RCHEs. In the future, VMPS can take up the role of enhancing infection control in RCHEs.

A Secondary Data analysis on Pain Interference and Pain Knowledge: Does It Relate to Depression, Self-efficacy and Quality of Life among The Older Adults Living in Nursing Homes?

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Background: Chronic pain is highly prevalent among older adults, particularly those in nursing homes. Pain is shown to interfere with pain knowledge, quality of life, pain self-efficacy, pain score and depression in foreign countries but the relationship between pain interference and these aspects are yet established. Pain knowledge is an important alleviating factor to pain. However, current studies mainly investigate the effectiveness of pain management educational programmes. Studies discussed the relationship between pain knowledge and demographic characteristics and the relationship between it and the above outcome measures are scarce.

Aim: To investigate the influences of pain interference and pain knowledge on pain intensity, depression, self-efficacy and quality of life of the older adults living in Hong Kong nursing homes.

Design: This study is a secondary data analysis from a data set of a study conducted by the School of Nursing, The Hong Kong Polytechnic University conducted from 2018 to 2021. The primary study was a cluster randomized controlled trial (RCT), which was designed to determine the effect of a peer-led management program for older adults.

Method: Letters were sent to 291 government-subsidized nursing homes to invite older adults to participate in the study. A total of 262 participants, who successfully fulfilled the inclusion and exclusion criteria, were recruited. Standardized questionnaires were used to collect the demographic data (including age, gender, educational level, marital status, occupation, length of nursing home staying, and health history), pain knowledge, pain score, pain interference, pain self-efficacy, depression level and quality of life.

Results: Pain interference had significant positive correlations with pain score and depression and significant negative correlations with quality of life and pain self-efficacy. Pain knowledge was significantly positively correlated with higher levels of pain interference. Pain score had significant positive correlations with pain interference and depression and significant negative correlations with quality of life and pain self-efficacy. Pain knowledge was significantly negatively correlated with moderate levels of pain score. Pain knowledge was significantly negatively correlated with moderate levels of pain score. Pain knowledge was significantly positively correlated with educational level but not with other demographic data. However, there is no significant relationship between pain knowledge at different levels and the other outcome measures.

Immersive virtual reality interventions for enhancing empathy of informal caregivers of people with dementia: an integrated review

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Introduction: Informal caregivers (CGs) play an important role in dementia care. Improving their understanding of dementia may reduce their stress. Virtual reality (VR) is a technology used to let people experience dementia, to increase their understanding of the disease through experiential learning. This review examined existing evidence for the effects of VR on empathy of informal CGs of people with dementia.

Methods: A systematic literature search was performed in Pubmed, Cochrane Library, CINAHL, Embase, Scopus, Web of Science, PsycInfo, and Chinese National Knowledge Infrastructure. Randomized controlled trials and quasi-experimental studies published between 2010 to Aug 2020 that evaluated the effects of VR on empathy of informal CGs were included. Reference lists of included studies were screened manually.

Results: From 3882 potential studies identified from the database search, full-text review of 10 articles were performed and six studies met the inclusion criteria. Among the included studies, four studies were qualitative evaluation studies. There was only one study that contained appropriate data and therefore metaanalysis was not performed. The effect size of the intervention reported in this pre-and-post study was moderate on the Interpersonal Reactivity Index (IRI, Cohen's d = 0.42). Qualitative data also demonstrated the acceptability and positive effects of VR. In general, five studies reported positive results and one study reported no significant difference between the experimental and usual care groups.

Conclusions: To our best knowledge, this is the first review evaluating the evidence of using VR for enhancing empathy of informal CGs of people with dementia. Despite the limited evidence of the present review, innovative technology has been increasingly adopted to support CGs. To address this potential emerging research area, further rigorous research is recommended to better elucidate the impact of VR on CGs' outcomes.

PROSPERO registration: CRD42020191518

Cognitive decline and incontinence in long-term care settings

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Introduction: In the literature, it is known that cognitive decline would lead to bladder and bowel incontinence. However, whether incontinence would lead to a faster decline of cognitive function is not known.

Purpose: The aim of this study is to examine the relationship between incontinence pattern and cognitive decline in long-term care settings.

Method: A secondary data analysis of a longitudinal study was conducted from 2005 to 2016 in 11 nursing homes. Eligibility of participant criteria aged \geq 60 elderly who had no less than 3 years residency and without severe cognitive impairment at baseline. Hong Kong version of Minimum Data Set-Resident Assessment Instrument Version 2.0 was used to measure the variables. The dependent variable was the change of cognitive performances between the first and last assessment. Independent variables included frequency of bowel and bladder incontinence at baseline. Linear regression analysis was employed for testing the hypotheses. The models were adjusted for age, gender and five chronic illnesses related to the dependent and independent variables.

Results: Within the mean follow up period of 4.4 ± 0.8 years, 2,233 residents with mean age 82.1 ± 8.2 participated in the study. It was found that improved CPS score was observed in residents without bowel incontinence when compared to its counterpart (b=-0.378). Moreover, we observed that there was larger change in CPS score in bowel incontinence by comparing to bladder incontinence (b=-0.303, b=-0.282). In addition, dual incontinence was found to have greater decrease of CPS score when compared to single incontinence (b=0.354, b=0.232, b=0.180).

Conclusion: Different training improving problem of incontinence should be encouraged in long term care settings as positive effect on both cognitive function and self-esteem can be brought to residents. Further studies are necessary to validate the implication of slower deterioration of incontinence on the rate of cognitive decline.

Thank You