THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學
COLLEGE OF PROFESSIONAL AND CONTINUING EDUCATION
專業及持續教育學院

HONG KONG COMMUNITY COLLEGE
香港專上學院

School of Professional Education and Executive Development
專業進修學院
SPEED

Centre for Ageing and Healthcare Management Research
老齡化和醫療管理研究中心

CPCE Health Conference 2020



PROGRAMME BOOK

Ageing with Health and Dignity: Implications for Public Policy, Service Delivery, Workforce, Technology and Financing
健康而具尊嚴的老齡化：對公共政策、服務、勞動力、科技和融資的影響

Register Now

Date: 13 January 2020 (Monday) **Time: 9:00 am - 6:00 pm**

Venue: PolyU Hung Hom Bay Campus, 8 Hung Lok Road, Hung Hom, Kowloon

Co-Organisers:

Bronze Sponsor:

Pfizer 輝瑞 168·家·健康

Sponsor:

盈健醫療 HUMAN HEALTH

Supporting Organisations

The conference is partially supported by a grant from the Research Grants Council of the Hong Kong Special Administrative Region, China (Project No.: UGC/IDS24/18)

CONTENTS

I. INTRODUCTION 1

II. ORGANISATION OF CONFERENCE 3

Conference Chair 3

Conference Co-Chairs 3

Conference Organiser 3

Conference Advisors 3

Organising Committee 4

Co-organisers and Supporting Organisations 5

Co-organisers 5

Supporting Organisations (in alphabetical order) 5

Sponsors 6

III. PROGRAMME 7

Welcoming Remarks 7

Professor Peter P. YUEN 7

Dean, College of Professional and Continuing Education (CPCE); Professor, Department of Management and Marketing, The Hong Kong Polytechnic University 7

Invited Speakers 8

Professor Toshihiko HASEGAWA 8

President, Future Health Research Institute, Japan 8

Professor Peter P. YUEN 8

Dean, College of Professional and Continuing Education (CPCE); Professor, Department of Management and Marketing, The Hong Kong Polytechnic University 8

Professor Kenneth K. C. LEE 9

Professor of Pharmacy, School of Pharmacy, Monash University Malaysia 9

Professor Dongwoon HAN 10

Professor, College of Medicine, Hanyang University, South Korea 10

Professor Tomonori HASEGAWA 11

Professor and Chair, Division of Health Policy and Health Service Research Department of Social Medicine, Toho University School of Medicine, Japan 11

Dr Hui (Vivienne) ZHANG 11

Assistant Professor, Department of Health Policy and Management, Sun Yat-sen University, Chinese Mainland 11

Dr the Honourable LAM Ching-choi, SBS, JP 12

Chief Executive Officer, Haven of Hope Christian Service; Member of the Executive Council, HKSAR *12*

Dr Christopher Chor-ming LUM 12

Consultant Geriatrician, Shatin Hospital, Hospital Authority of Hong Kong *12*

Ir Dr Eric TAM 13

Associate Dean of Students / Head of Office of Student Resources and Resident Life / Assistant Professor, Department of Biomedical Engineering, The Hong Kong Polytechnic University *13*

Ms Samantha Yuen Chun CHONG 13

President, Hong Kong College of Nursing and Health Care Management; Associate Professor (Nursing Practice), School of Nursing, The University of Hong Kong *13*

Moderators of Keynote and Plenary Presentations 15

Professor Peter P. YUEN 15

Dean, College of Professional and Continuing Education (CPCE), Professor, Department of Management and Marketing, The Hong Kong Polytechnic University *15*

Professor Wu LIU 15

Professor and Head of Department of Management and marketing, The Hong Kong Polytechnic University *15*

Dr Simon T. Y. CHEUNG 15

Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE *15*

Dr Vincent T. S. LAW 15

Senior Lecturer, Division of Social Sciences, Humanities and Design, PolyU CPCE; Academic Convenor, Centre for Ageing and Healthcare Management Research (CAHMR), PolyU SPEED *15*

Ms Samantha Yuen Chun CHONG 15

President, Hong Kong College of Nursing and Health Care Management *15*

Professor Warren C. K. CHIU 15

Associate Dean, College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University *15*

Dr Jack M. K. LO 16

Director, PolyU SPEED *16*

Dr Artie W. NG 16

Principal Lecturer and Deputy Director, PolyU SPEED *16*

Dr Adam K. L. WONG 16

Senior Lecturer, Division of Science, Engineering and Health Studies and Programme Director, PolyU CPCE *16*

Professor Geoffrey LIEU 16

Founder and the Chairman Emeritus, Institute for Health Policy and System Research *16*

Facilitator of the Discussion Session 16

Dr Ben Y. F. FONG 16

Senior Lecturer and Associate Division Head, Division of Science, Engineering and Health Studies and Programme Director, PolyU CPCE; Director, Centre for Ageing and Healthcare Management Research (CAHMR), PolyU SPEED 16

Moderators of Parallel Sessions 17

Dr Florence H. C. HO 17

Senior Lecturer, Division of Business and Hospitality Management, PolyU CPCE 17

Dr Carrie H. S. WONG 17

Senior Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE 17

Dr Daisy S. M. LEE 17

Senior Lecturer, Division of Business and Hospitality Management, PolyU CPCE 17

Dr Karly O. W. CHAN 17

Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE 17

Ms Alisa K. P. WONG 17

Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE 17

Mr Tommy K. C. NG 17

Project Associate, Centre for Ageing and Healthcare Management Research, PolyU SPEED 17

Dr Fowie S. F. NG 17

Academic Convenor, Hong Kong College of Health Service Executives (HKCHSE) 17

Ms Inez Y. S. WU 17

Council Member, Hong Kong College of Health Service Executives (HKCHSE) 17

Dr Idy C. Y. FU 18

Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE 18

Dr Tiffany C. H. LEUNG 18

Assistant Professor, City University of Macau; Member, Centre for Ageing and Healthcare Management Research, PolyU SPEED 18

Miss Billie S. M. CHOW 18

Senior Lecturer, Division of Business and Hospitality Management, PolyU CPCE 18

Mr Patrick K. C. CHAN 18

Lecturer, Division of Social Sciences, Humanities and Design, PolyU CPCE 18

Programme Rundown 19

IV. KEYNOTE PRESENTATIONS 23

Keynote I: East Asian Position in World Ageing and Health & Social Transition 23

Professor Toshihiko HASEGAWA 23

President, Future Health Research Institute, Japan *23*

Keynote II: Tax-based Health Financing Sustainability: Examining the Effects of Demographics, Medical Inflation and Economic Growth in Hong Kong by 2039 ..... **23**

Profesor Peter P. YUEN 23

Dean, College of Professional and Continuing Education (CPCE); Professor, Department of Management and Marketing, The Hong Kong Polytechnic University *23*

Keynote III: Innovative Patient Access Schemes to New Pharmaceuticals for the Elderly **24**

Professor Kenneth K. C. LEE 24

Professor of Pharmacy, School of Pharmacy, Monash University Malaysia *24*

Keynote IV: Bridging Health Care and Social Care for Elderly in Korea **25**

Professor Dongwoon HAN 25

Professor, College of Medicine, Hanyang University, South Korea *25*

Keynote V: Social and health sector reform towards 2040 in Japan **26**

Professor Tomonori HASEGAWA 26

Professor and Chair, Division of Health Policy and Health Service Research Department of Social Medicine, Toho University School of Medicine, Japan *26*

Keynote VI: Costs of Hospitalization for Stroke from Two Urban Health Insurance Claims Data in Guangzhou City, Southern China **26**

Dr Hui (Vivienne) ZHANG 27

Assistant Professor, Sun Yat-sen University, School of Public Health, Guangzhou, China *27*

Keynote VII: Primary Healthcare: Enhancing Health and Dignity **27**

Dr LAM Ching-choi, SBS, JP 27

Chief Executive Officer, Haven of Hope Christian Service; Member of the Executive Council, HKSAR *28*

V. PLENARY SESSIONS **29**

Plenary I: Ageing in Place – Where are We Now and the Challenges Ahead **29**

Dr Christopher Chor-ming LUM 29

Consultant Geriatrician, Shatin Hospital, Hospital Authority of Hong Kong *29*

Plenary II: Gerontechnology: Solution to Successful Ageing? **29**

Ir Dr Eric TAM 29

Associate Dean of Students / Head of Office of Student Resources and Resident Life / Assistant Professor, Department of Biomedical Engineering, The Hong

Kong Polytechnic University 29

Plenary III: Healthy Death: Will It be a Solution for Challenge of Ageing Population in Hong Kong? **30**

Samantha Yuen Chun CHONG 30

President, Hong Kong College of Nursing and Health Care Management; Associate Professor (Nursing Practice), School of Nursing, The University of Hong Kong *30*

VI. PARALLEL SESSIONS **31**

Parallel Session A: Ageing and Health Policy **31**

A1. Estimating Social Burden of 3 Major Diseases including LTC in Japan - Super-aging Society Changes the Breakdown of Burden 31

Koki HIRATA [1], Kunichika MATSUMOTO [2], Tomonori HASEGAWA [2]* *31*

[1] Toho University Graduate School of Medicine, Department of Social Medicine, Japan *31*

[2] Toho University School of Medicine, Department of Social Medicine, Japan *31*

A2. Ageing with Health and More Quality of Life: Not Just a Wishful Perspective BUT a Goal That Can be Achieved 32

Christine Y. T. LAM [1], Florence H. C. HO [2]* *32*

[1] Haven of Hope Christian Service, Hong Kong *32*

[2] Division of Business and Hospitality Management (BHM),College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong *32*

A3. The Use of Health Care Voucher by Elderly for Services in a Primary Care Organization 33

Joyce S. F. TANG [1], Ruby L. K. LAI [1], Maggie Y. L. CHU [2], Peter K. F. HO [1]* *33*

[1] Preventive Medicine & Clinical Service Division, United Christian Nethersole Community Health Service, Hong Kong *33*

[2] Finance & Accounting Division, United Christian Nethersole Community Health Service, Hong Kong *33*

A4. Health Worker Home Visit Effect on Elderly Health 34

Joyce S. F. TANG, Jenny W. M CHEUNG, Peter K. F. HO[*] *34*

Preventive Medicine & Clinical Service Division, United Christian Nethersole Community Health Service, Hong Kong *34*

A5. An Assessment Framework for Private Hospitals' Social Responsibility 35

Edmund T. M. WUT *35*

Division of Business and Hospitality Management (BHM),College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong *35*

Parallel Session B: Service Delivery and Care **37**

B1. Introduction of An Assistant Workforce to Enhance Older People's Care in Emergency Department 37

Jane CONWAY [1], Carolyn HULLICK [2]* *37*

[1] Faculty of Medicine and Health, University of New England, NSW Australia *37*

[2] Emergency Physician, Hunter New England Local Health District, NSW Australia *37*

B2. Perceived Medical Quality and Well-being Perception of Senior Tourists.....38

Pimtong TAVITIYAMAN [1], Wanlanai SAIPRASERT [2] 38*

[1] Division of Business and Hospitality Management (BHM), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong 38

[2] Faculty of Business Administration, Chiang Mai University, Thailand 38

B3. Effectiveness of Rheumatology Pharmacist Counseling Service in Improving Medication Adherence and Disease Activity of Arthritis Patients 38

Shirley YIP [1], Gary Chung Hong CHONG [1], Daisy S. M. LEE [2] 38*

[1] United Christian Hospital, Hong Kong.....38

[2] Division of Business and Hospitality Management (BHM), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong 38

B4. Retrospective Evaluation on Patient Screening and Counseling Service on Direct-acting antivirals against Hepatitis C.....39

Bob Ka Him WONG [1], Gary Chung Hong CHONG [2] 39

[1] Prince of Wales Hospital, Hospital Authority, Hong Kong.....39

[2] Department of Pharmacy, United Christian Hospital, Hospital Authority, Hong Kong 39

B5. A Randomized Controlled Trial: Vibration Therapy Improves Postural Stability and Prevents Falls after Distal Radius Fracture in Elderly Patients 40

Percy Wing Tung HO [1], Ning TANG [2], Raymond Wai Kit NG [2], Simon Kwoon-Ho CHOW [1], Wing-Hoi CHEUNG [1], Ronald Man Yeung WONG [1] 40*

[1] Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong, Hong Kong.....40

[2] Department of Orthopaedics and Traumatology, Prince of Wales Hospital, Hospital Authority, Hong Kong 40

B6. A Pilot Study on the Body Mass Index (BMI) and Percentage Body Fat (PBF) of a Group of College Students 41

Karly O. W. CHAN [*], Elegance T. P. LAM, Joseph C. H. SO.....41

Division of Science, Engineering and Health Studies (SEHS), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong 41

Parallel Session C: Community Health with Dignity 43

C1. Long-term Exercise Adherence in Community Dwelling Older Americans with Knee Osteoarthritis.....43

Corjena CHEUNG [1], Jean WYMAN [2], Cynthia PEDEN-McALPINE [2].....43*

[1] Health Department, Hong Kong Adventist College, Hong Kong 43

[2] School of Nursing, University of Minnesota, Minnesota, U.S.A.....43

C2. A Systematic Review and Meta-analysis of Physical Activity Intervention for Community-dwelling Older Adults 44

Janet L. C. LEE 44

Department of Social Work and Social Administration, The University of Hong Kong, Hong Kong.....44

C3. A Qualitative GIS Investigation in Exploring the Older Adults' Perceptions of Their Exercise Space in the Neighbourhood and the Planned Exercise Space Designed for Them 45

Janet L. C. LEE [1], Yingqi GUO [1,4], Rainbow T. H. HO [1,2,3]* *45*

[1] Department of Social Work and Social Administration, The University of Hong Kong, Hong Kong *45*

[2] Centre on Behavioral Health, The University of Hong Kong, Hong Kong *45*

[3] Sau Po Center on Aging, The University of Hong Kong, Hong Kong *45*

[4] Centre for Suicide Research and Prevention, The University of Hong Kong, Hong Kong *45*

C4. Effects of Ving Tsun Martial Art Training on Standing Balance Performance, Leg Muscle Strength, Knee Joint Proprioception and Reaction Time in Community-dwelling Middle-aged and Older Adults 46

Shirley S. M. FONG [1,2], Timothy T. T. YAM [1], Yvonne T. C. CHAK [3], Joyce C. Y. LEUNG[4,5], William W. N. TSANG [4]* *46*

[1] School of Public Health, University of Hong Kong, Hong Kong *46*

[2] School of Nursing and Healthcare, Hong Kong Nang Yan College of Higher Education, Hong Kong *46*

[3] Hong Kong Christian Service, Hong Kong *46*

[4] School of Nursing and Health Studies, Open University of Hong Kong, Hong Kong *46*

[5] Department of Social Work and Social Administration, University of Hong Kong, Hong Kong *46*

C5. Ageing Pattern and Functioning Abilities among Adults with Intellectual Disability in Residential Setting in Hong Kong: Exploring the Need of Early Elderly Services 47

Phil W. S. LEUNG [1], Virginia H. C. LEUNG [1], Doris S. C. LEUNG [1], Oliver C. K. WONG [2], M. Y. LAW [1], Queenie M. W. TAM [1], Carmen S. O. TSANG [1]* *47*

[1] Rehabilitation Service, Have of Hope Christian Service, Hong Kong *47*

[2] Haven of Hope Nursing Home, Haven of Hope Christian Service, Hong Kong *47*

C6. Services to Support Dying at Home 48

Bryan P. C. CHIU [1], Ben Y. F. FONG [2]* *48*

[1] School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong *48*

[2] College of Professional and Continuing Education, The Hong Kong Polytechnic University, Hong Kong *48*

Parallel Session D: Application of Technology in Aged Health and Safety 50

D1. Innovative Virtual Reality Simulation as Practice Tools for Dementia 50

Wai-kwong POON [1], B. Y. C. LAU [2]* *50*

[1] Accident and Emergency Medicine Academy Unit, Faculty of Medicine, The Chinese University of Hong Kong, Hong Kong *50*

[2] Department of Applied Science, Hong Kong Institute of Vocational Education (Kwai Chung), Hong Kong *50*

D2. Comparative Analysis of Policy in End-of-Life Issues in Hong Kong and Macau 51

Fowie S. F. NG [1], H. C. MA [2]* *51*

[1] *Hong Kong College of Health Service Executives, Hong Kong* *51*

[2] *Kiang Wu Hospital, Macau* *51*

D3. Medical Training with Virtual Reality (VR) for the Aged 51

Y. M. TANG [1], Joseph Yui-yip LAU [2]* *51*

[1] *Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University, Hong Kong* *51*

[2] *Division of Business and Hospitality Management (BHM), College of Professional and Continuing Education, The Hong Kong Polytechnic University, Hong Kong* *51*

D4. Deployment of Virtual Reality (VR) to Promote Green Burial 52

Joseph Yui-yip LAU [1], Y. M. TANG [2], Adolf K. Y. NG [3,4], Ivy N. M. CHAN [1]* *52*

[1] *Division of Business and Hospitality Management (BHM), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong* *52*

[2] *Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University, Hong Kong* *52*

[3] *Department of Supply Chain Management, Asper School of Business, University of Manitoba, Canada* *52*

[4] *St. John's College, University of Manitoba, Canada* *52*

D5. Reflection on the Study of Brain Health and Dementia (大腦健康與認知障礙症照顧的個人反思) 53

黃承志 Leader S. C. WONG *53*

School of Professional Education and Executive Development, The Hong Kong Polytechnic University *53*

Parallel Session E: Health in Greater Bay Area 55

E1. A Tale of Two Cities – A Comparative Study of the Policies and Social Welfare Services for the Elderly in Hong Kong and Macau 55

Ray Y. L. CHOY *55*

Department of Innovative Social Work, City University of Macau, Macau *55*

E2. Spatial Design and Application of Residential Care in the Smart Community: A Case Study of Guangzhou City (智慧社區居家養老平台空間設計與實現 — 以廣州市為例) 55

江瑜 Yu JIANG、梁靜嫻 Tiffany C. H. LEUNG *55*

澳門城市大學創新社會工作系 (Department of Innovative Social Work, City University of Macau, Macau) *56*

E3. The Influence of Attachment on Subjective Well-being of Elderly Couples -- the Mediating Effect of Emotion Regulation Strategies (長者夫妻依戀對主觀幸福感的影響 —— 情緒調節策略的中介作用) 56

李儀嘉 Yijia LI、蔡遠寧 Ray Y. L. CHOY* *56*

澳門城市大學創新社會工作系 (Department of Innovative Social Work, City University of Macau, Macau) *56*

E4. A System Study of the Quantity of Health Service for Disabled Elders and Social Support: Case Study of Chengdu (城市失能長者衛生服務數量與社會支持系統研究——以成都市為例) 57

王芷璿 Zhixuan WANG *57*

澳門城市大學 (City University of Macau, Macau) *57*

Parallel Session F: Service Learning and Ageing 59

F1. Achieving Elder's Ego Integrity by Instrumental Reminiscence Intervention (IRI) 59

Morris Wai Keung LEUNG *59*

Social Worker, Ho Chui District Community Centre for Senior Citizens (Sponsored by Sik Sik Yuen), Hong Kong *59*

F2. Providing Elderly Care through Service-Learning: A Case Study and Proposal to Generate Subject Ideas in an Effective Manner 60

Patrick K. C. CHAN *60*

Division of Social Sciences, Humanities and Design (SSHD), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong *60*

F3. Community Ageing with Health and Dignity through a Service Learning Initiative 60

Ben Y. F. FONG [1], Hilary H. L. YEE [2], Tommy K. C. NG [2], Billie S. M. CHOW [3]* *60*

[1] Division of Science, Engineering and Health Studies (SEHS), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong *60*

[2] Centre for Ageing and Healthcare Management Research (CAMHR), School of Professional Education & Executive Development (SPEED), The Hong Kong Polytechnic University, Hong Kong *61*

[3] Division of Business and Hospitality Management (BHM), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong *61*

F4. Treasure in Elderly Home – A Service Learning Experience at Ho Wong Neighborhood Centre for Senior Citizens 61

Roderick C. H. FUNG *62*

School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong *62*

F5. Active Ageing 開心 Share: to Solicit Solutions to Ageing from a Multidisciplinary Perspective 62

Ada L. H. NG, Louis K. L. TONG, Cecily K. K. PANG, CK C. K. NG *62*

Institute of Active Ageing, The Hong Kong Polytechnic University, Hong Kong *62*

VII. POSTER PRESENTATIONS 66

P1. Home Hygiene and Prevention of Infections 66

Sukhpreet KAUR 66

P2. Quality Improvement of Operating Theatres in Hong Kong Public Hospitals 68

Carina Y. H. LAM 68

School of Professional Education & Executive Development, The Hong Kong Polytechnic University, Hong Kong *68*

P3. Improvement of Health Care Voucher Scheme in Hong Kong 70

Cheryl C. W. HO 70

School of Professional Education & Executive Development, The Hong Kong Polytechnic University, Hong Kong 70

P4. Quality Management of Inpatient Medication Administration in Hong Kong Public Hospitals 72

Catherine K. Y. KWONG 72

School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong 72

P5. Project Management in Promoting Green Burial in Hong Kong 74

Cynthia S. Y. LAU 74

School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong 74

P6. Analysis of Operations of Pharmacy in Hong Kong 76

Alex H. Y. SUEN 76

School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong 76

P7. Retirement Preparation in Hong Kong 78

May S. M. CHAN [*], Maggie H. Y. KWONG 78

School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong 78

P8. Time Banking for Elderly/Volunteers in Hong Kong: Current Practice and Challenges 80

Tommy K. C. NG [1*], Noel T. S. YIM [1], Ben Y. F. FONG [2] 80

[1] School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong 80

[2] College of Professional and Continuing Education, The Hong Kong Polytechnic University, Hong Kong 80

P9. Changes on Ageing Causes: from Service Learning Perspectives 82

Jason Y. L. WONG 82

School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong 82

P10. Palliative Care in Selected Economies in Asia: Taiwan, Singapore and Hong Kong 84

Hilary H. L. YEE [1*], Ben Y. F. FONG [2] 84

[1] School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong 84

[2] College of Professional and Continuing Education, The Hong Kong Polytechnic University, Hong Kong 84

ACKNOWLEDGEMENT 86

I. INTRODUCTION

The College of Professional and Continuing Education (CPCE) of The Hong Kong Polytechnic University (PolyU), incorporating the School of Professional Education and Executive Development (SPEED) and the Hong Kong Community College (HKCC), is currently the largest self-financing tertiary education provider in Hong Kong. It has around 10,000 full time students. It offers a range of programmes in many different disciplines including health related programmes at Associate Degree, and Honours Bachelor's Degree levels.

This Conference with the theme "**Ageing with Health and Dignity: Implications for Public Policy, Service Delivery, Workforce, Technology and Financing**" aims to solicit solutions to ageing from a multidisciplinary perspective. The conference is partially supported by a funding of HKD2.45 million under the Institutional Development Scheme (IDS) of the Competitive Research Funding Schemes for the Local Self-Financing Degree Sector in 2018/19 of the Research Grants Council (RGC) to establish the **Centre for Ageing and Healthcare Management Research (CAHMR)** [Ref. no.: UGC/IDS24/18].

CAHMR will leverage the expertise and interest among faculty members, connecting them from a diverse array of disciplines and cultivating their scholarship in the realms of health care, health services management, finance, information technology, data science, public policy, marketing and hospitality management. The goal is to develop CAHMR into a centre of excellence with four fundamental objectives:

1. Generating novel and useful knowledge;
2. Developing research capabilities of faculty members;
3. Sharing insights with stakeholders; and
4. Informing curriculum development across related academic programmes.

Speakers for the Keynote Presentations include: (1) **Professor Toshihiko HASEGAWA**, President, Future Health Research Institute, Japan, to speak on "*East Asian Position in World Ageing and Health & Social Transition*", (2) **Professor Peter P. YUEN**, Dean, College of Professional and Continuing Education (CPCE); Professor, Department of Management and Marketing, The Hong Kong Polytechnic University, to speak on "*Tax-based Health Financing Sustainability: Examining the Effects of Demographics, Medical Inflation and Economic Growth in Hong Kong by 2039"*, (3) **Professor Kenneth K. C. LEE**, Professor, School of Pharmacy, School of Pharmacy, Monash University Malaysia, to speak on "*Innovative Patient Access Schemes to New Pharmaceuticals for the Eldely*", (4) **Professor Dongwoon HAN**, Professor, College of Medicine, Hanyang University, South Korea, to speak on "*Bridging Health Care and Social Care for Elderly in Korea"*, (5) **Professor Tomonori, HASEGAWA**, Professor and Chair, Division of Health Policy and Health Service Research Department of Social Medicine, Toho University School of Medicine, Japan, to speak on "*Social and Health Sector Reform towards 2040 in Japan*", (6) **Dr Hui (Vivienne) ZHANG**, Assistant Professor, Department of Health Policy and Management,

Sun Yat-sen University, Guangzhou, China, to speak on "*Costs of Hospitalization for Stroke from Two Urban Health Insurance Claims Data in Guangzhou City, Southern China*", and (7) **Dr the Honourable LAM Ching-choi**, SBS, JP, Chief Executive Officer, Haven of Hope Christian Service and Member of Executive Council, The Government of the Hong Kong Special Administrative Region, to speak on "*Primary Healthcare: Enhancing Health and Dignity*".

Speakers for the plenary sessions include: (1) **Dr Christopher Chor-ming LUM**, Consultant Geriatrician, Shatin Hospital, Hospital Authority of Hong Kong, to speak on "*Ageing in Place – Where are We Now and the Challenges Ahead*", (2) **Ir Dr Eric TAM**, Associate Dean of Students / Head of Office of Student Resources and Resident Life / Assistant Professor, Department of Biomedical Engineering, The Hong Kong Polytechnic University, to speak on "*Gerontechnology: Solution to Successful Ageing?*", and (3) **Ms Samantha Yuen Chun CHONG**, President, Hong Kong College of Nursing and Health Care Management; Associate Professor (Nursing Practice), School of Nursing, The University of Hong Kong, to speak on "*Healthy Death: Will It be a Solution for Challenge of Ageing Population in Hong Kong?*".

There are six parallel sessions containing a wide range of important topics pertinent to ageing and healthcare management that are not only crucial to Hong Kong and also to other international communities. We are delighted to report that contributors to these parallel sessions include scholars and practitioners from Australia, Canada, Chinese Mainland, Hong Kong, Japan, Macau, South Korea, Thailand, as well as the United States of America. These contributors from the region and other parts of the world share their perspectives about ageing and healthcare management which include ageing and health policy, service delivery and care, community health with dignity, application of technology in aged health and safety, health in the Greater Bay Area, as well as service learning and ageing.

II. ORGANISATION OF CONFERENCE

Conference Chair

Professor Peter P. YUEN
Dean, College of Professional and Continuing Education (CPCE);
Professor, Department of Management and Marketing, The Hong Kong Polytechnic University

Conference Co-Chairs

Dr S. H. LIU
President,
Hong Kong College of Health Service Executives (HKCHSE)

Ms Samantha Yuen Chun CHONG
President,
Hong Kong College of Nursing and Health Care Management (HKCNHCM)

Conference Organiser

Centre for Ageing and Healthcare Management Research (CAHMR) at SPEED, PolyU

Conference Advisors

Professor Peter FONG
President, Hong Kong Public Administration Association (HKPAA)

Dr the Honourable LAM Ching-choi, BBS, JP
Chief Executive Officer, Haven of Hope Christian Service and Member of Executive Council, The Government of the Hong Kong Special Administrative Region

Professor Albert LEE
Director, Centre for Health Education and Health Promotion, The Chinese University of Hong Kong

Professor Kenneth K. C. LEE
Professor of Pharmacy, School of Pharmacy, Monash University Malaysia

Professor Ting-hung LEUNG, BBS
Director, School of Chinese Medicine, The Chinese University of Hong Kong

Professor Warren C. K. CHIU
Associate Dean, College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University

Dr Simon LEUNG
Associate Dean, College of Professional and Continuing Education (CPCE), and Director, Hong Kong Community College (HKCC), The Hong Kong Polytechnic University

Dr Jack M. K. LO
Director, School of Professional and Executive Development (SPEED), The Hong Kong Polytechnic University

Dr Anthony LOH
Division Head, Division of Science, Engineering and Health Studies, College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University

Organising Committee

Chair	**Dr Ben Y. F. FONG**, Senior Lecturer and Associate Division Head, Division of Science, Engineering and Health Studies, PolyU CPCE
Scientific Subcommitte Chair	**Dr Artie W. NG**, Principal Lecturer and Deputy Director, PolyU SPEED
Publication	**Dr Vincent T. LAW**, Senior Lecturer, Division of Social Sciences, Humanities and Design, PolyU CPCE
Media and Publicity	**Ms Sophia WONG**, Marketing and Communications Officer, PolyU SPEED
Administrative Support	**Ms Isis CHEUNG**, Programme Manager, PolyU HKCC
Website & IT Support	**Mr William LO**, Information Technology Manager, PolyU CPCE
Members	**Dr Pimtong TAVITIYAMAN**, Senior Lecturer and Associate Division Head, Division of Business and Hospitality Management, PolyU CPCE
	Dr Adam K. L. WONG, Senior Lecturer, Division of Science, Engineering and Health Studies and Programme Director, PolyU CPCE
	Dr Simon T. Y. CHEUNG, Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE
	Dr Idy C. Y. FU, Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE
	Ms Alisa K. P. WONG, Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE
Secretary	**Mr Tommy K. C. NG**, Project Associate, Centre for Ageing and Healthcare Management Research (CAHMR), PolyU SPEED
	Ms Hilary H. L. YEE, Research Assistant, Centre for Ageing and Healthcare Management Research (CAHMR), PolyU SPEED

Co-organisers and Supporting Organisations

Co-organisers

- Hong Kong College of Community Health Practitioners (HKCCHP)
- Hong Kong College of Health Service Executives (HKCHSE)
- The Hong Kong College of Nursing and Health Care Management (HKCNHCM)

Supporting Organisations (in alphabetical order)

- ASEAN Institute for Health Development (AIHD), Mahidol University, Thailand
- Asia Pacific Journal of Health Management (APJHM)
- Australasian College of Health Service Management (ACHSM), Australia
- Auxiliary Medical Service (AMS)
- Caritas Institute of Community Education (CICE)
- Centre for Global Health Observatory, City University of Macau, Macau
- Centre for Health Education and Health Promotion, The Chinese University of Hong Kong
- College of Pharmacy Practice
- Department of Applied Science, Hong Kong Institute of Vocational Education (Kwai Chung)
- DoctorNow NEEDS
- Hong Kong Association of Family Medicine and Primary Health Care Nurses
- HKMA Institute of Healthcare Management
- Hong Kong Public Administration Association (HKPAA)
- Hong Kong Society for Rehabilitation (HKSR)
- Hong Kong Telemedicine Association
- Institute of Life Course and Aging, Factor-Inwentash Faculty of Social Work, University of Toronto, Canada
- Institute of Active Aging (IAA), The Hong Kong Polytechnic University
- Knowledge Management and Innovation Research Centre (KMIRC), The Hong Kong Polytechnic University
- Macau Association of Health Service Executives, Macau
- School of Chinese Medicine, The Chinese University of Hong Kong
- Sik Sik Yuen
- Society for Health Administration Programs in Education (SHAPE), Australia
- Society for the Promotion of Hospice Care (SPHC)
- Walailak University, Thailand
- Yee Hong Centre for Geriatric Care, Canada

Sponsors

Bronze Sponsor

- Pfizer Corporation Hong Kong Limited

Sponsor

- Human Health HK Limited

III. PROGRAMME

Welcoming Remarks



Professor Peter P. YUEN

Dean, College of Professional and Continuing Education (CPCE); Professor, Department of Management and Marketing, The Hong Kong Polytechnic University

BA, MBA [S.U.N.Y. (Buffalo)]; PhD (Birm.); FCHSM (Aust.)

It gives me much pleasure to welcome you to the CPCE Health Conference 2020: "**Ageing with Health and Dignity: Implications for Public Policy, Service Delivery, Workforce, Technology and Financing**". While Hong Kong has the longest life expectancy in the world and a GDP higher than many industrialized countries, we know well that many of our elderly residents do not age with health and dignity. Close to 7% of our elderly population are institutionalized, which is double/triple the rate of many of our neighbours. 90% of all deaths occur in public hospitals, which is highly undesirable. Waiting time in public hospitals for diagnosis and treatment of some chronic conditions is measured in years. We have a long way to go in terms of ageing with health and dignity.

The CPCE Health Conference was first organised in 2016. This current conference is the fifth consecutive annual conference by CPCE to explore issues relating to ageing, sustainability, healthcare delivery and financing reform, healthcare quality, and integrated model of care in Hong Kong and the Asia-Pacific region. This Conference is partially supported by a grant from the Research Grants Council (RGC) to establish the **Centre for Ageing and Healthcare Management Research (CAHMR)** under PolyU SPEED.

We are privileged to have academics and experts from Australia, Canada, Chinese Mainland, Hong Kong, Japan, Macau, South Korea, Thailand, as well as the United States of America here with us today. There will be ten plenary sessions and six concurrent sessions. Nearly 300 participants have registered.

I would like to express my sincere appreciation to the Conference Organising Committee, our co-organisers, our sponsors, our supporting organisations and my colleagues at CPCE for making this happen.

I wish to thank all participants for coming to the Conference. It is indeed our great pleasure to see so many old friends and new like-minded friends in this event.

As we are in January 2020, I wish to take this opportunity to wish everyone a Happy New Year and Good Health and an enjoyable and fruitful day at CPCE!

Invited Speakers



Professor Toshihiko HASEGAWA

President, Future Health Research Institute, Japan

MD, MPH, PhD

East Asian Position in World Ageing and Health & Social Transition

Prof. Hasegawa is President of the Future Health Research Institute. He is a retired Professor of Nippon Medical School after a long career in the Japanese government, including development of elderly care policy and management of Japanese national hospitals. He graduated from Harvard School of Public Health for MPH, from Osaka University Medical School for MD, and finished General Surgical Residency in Milwaukee, Wisconsin.

He has taught at many medical schools in Japan as Visiting Professor of health policy and hospital management. He has done research on health policy, health sector reform, planning and evaluation of disease management program, hospital strategic management and international health. Prof. Hasegawa has published many papers and books about ageing society, international health, health policy, hospital management, health care delivery system and safety and quality of care including the Hospital Strategic Management in 2002 (that has been translated in Korean, Thai, Russian and Chinese) and the International Symposium on Health Transition and Health Sector Reform in Asia in 1998.



Professor Peter P. YUEN

Dean, College of Professional and Continuing Education (CPCE); Professor, Department of Management and Marketing, The Hong Kong Polytechnic University

BA, MBA [S.U.N.Y. (Buffalo)]; PhD (Birm.); FCHSM (Aust.)

Tax-based Health Financing Sustainability: Examining the Effects of Demographics, Medical Inflation and Economic Growth in Hong Kong by 2039

Prof. Peter P. Yuen is Dean of the College of Professional and Continuing Education (CPCE) of The Hong Kong Polytechnic University (PolyU). He is also Professor of PolyU's Department of Management and Marketing. He received his Bachelor of Arts degree in Cellular and Molecular Biology and Master in Business Administration degree from the State University of New York at Buffalo, USA, and his Doctor of Philosophy degree in Health Economics from the University of Birmingham, UK.

Prior to his appointment as Dean of CPCE, Prof. Yuen held a number of management positions at PolyU, including Associate Vice-President (Management), Director of the Public Policy Research Institute, and Head of the Department of Management. He was also the founding Director of the Doctor of Business Administration programme in the Faculty of Business.

Prof. Yuen's research mainly focuses on public policy formulation and evaluation, and health services management. He is the Co-Editor-in-Chief of Public Administration and Policy and an Editorial Committee member of Asia Pacific Journal of Health Management. He was also a consultant for the Hong Kong Special Administrative Region (HKSAR) Government and the Bauhinia Foundation on a number of public policy related projects including the West Kowloon Cultural District, Sustainable Built Environment, Subsidised Homeownership, Managed Care in Hong Kong, and Health Systems Reform.

Prof. Yuen is currently the Immediate Past Chairman of the Federation for Self-financing Tertiary Education (Hong Kong). He has served as a member of the HKSAR Government Manpower Development Committee, Health and Medical Development Advisory Committee, and the Committee on Self-financing Post-secondary Education. He is a founding Fellow of the Hong Kong College of Health Services Executives, and an Honorary Fellow of the Australian College of Health Services Management. He once served as Vice-President of the Chinese National Institute of Health Care Management Education, and President of the Hong Kong Public Administration Association.



Professor Kenneth K. C. LEE

Professor of Pharmacy, School of Pharmacy, Monash University Malaysia

BSc(Pharmacy), MPhil, PhD

Innovative Patient Access Schemes to New Pharmaceuticals for the Elderly

Prof. Lee obtained his undergraduate degree in pharmacy from the University of Washington in Seattle, USA, and his subsequent higher qualifications from The Chinese University of Hong Kong (CUHK) and the University of Oxford, UK.

He is widely recognised as one of the pioneers in pharmacoeconomics and outcomes research in Asia, and was the founding president of the Hong Kong Chapter of the International Society for Pharmacoeconomics and Outcomes Research that was established in 1999. Prof. Lee was Professor and Associate Director of External Affairs of the CUHK School of Pharmacy, of which he was a founding member before he moved to Malaysia.

His concurrent academic appointments include Adjunct Professor of the CUHK School of

Pharmacy, Honorary Professor of the Li Ka Shing Faculty of Medicine of The University of Hong Kong, and Visiting Professor of the University of London School of Pharmacy, UK (2008-2011). Prof. Lee has also maintained very close links with academic institutions in mainland China for many years and has served as visiting scholar at a number of universities there.

He was appointed by the HKSAR Government as a Justice of the Peace in 2003 for his outstanding community services. He has published extensively in international peer-reviewed journals. He has been the Editor-in-Chief of Journal of Medical Economics (UK) since 2006 and recently appointed as the Co-Editor of Value in Health Regional Issue (US).



Professor Dongwoon HAN

Professor, College of Medicine, Hanyang University, South Korea

MD, MPH, PhD

Bridging Health Care and Social Care for Elderly in Korea

Prof. HAN, MD, MPH, PhD (in health service management) is a Professor at College of Medicine, Hanyang University, College of Medicine, and the Chairperson of Global Health and Development. He was also a chairperson of both the Department of Preventive Medicine, College of Medicine, and the Department of Medical Administration at Graduate School of Public Policy. He is also currently the Director of Institute of Health Services Management, Hanyang University. He received a bachelor's degree in medicine from College of Medicine, Hanyang University College of Medicine, master's degree (MPH) from Seoul National University, Graduate School of Public Health, and a doctoral degree from The University of Birmingham (UK). Prof. Han was a member of WHO working group for various health related topics including traditional medicine. For many years, he has worked as short-term consultant at many developing countries, Vietnam, Nepal, Cambodia, Iraq, Afghanistan, Peru, Honduras and so on. In his country, he has advised national and local governments on health promotion, health planning, and Official Development Assistant (in Health). Since 2004, he has been working to establish a public health programme using traditional Korean medicine in public health care system. Prof. Han is serving as Director of the National Traditional Korean Medicine Research and Development Centre. From 2010 to 2012, he had also directed a research team on the evaluation of Korean Case Payment System (KCPC) funded by the Health Insurance Review Agency (HIRA).



Professor Tomonori HASEGAWA

Professor and Chair, Division of Health Policy and Health Service Research Department of Social Medicine, Toho University School of Medicine, Japan

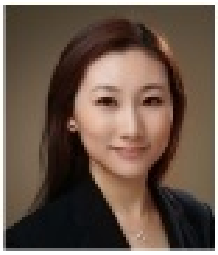
MD, PhD

Social and Health Sector Reform towards 2040 in Japan

Prof. Hasegawa is Professor and Chair of the Division of Health Policy and Health Service Research Department of Social Medicine at the Toho University School of Medicine of Japan. He had his medical education at the Tokyo University School of Medicine, where he also received his Doctor of Philosophy. He was previously a Resident at the Tokyo University Hospital in Internal Medicine.

He is a member of the Japanese Society of Public Health, Japanese Society of Hygiene, Japanese Society of Transplantation, Japanese Society of Hospital Administration, and Japanese Society of Healthcare Management. He also holds membership of the following specialist councils or committees: Ministry of Labour, Health and Welfare, Committee on Disclosure of Healthcare Information, Committee on the Administration of Healthcare Organisations, Cabinet Office Council for Regulatory Reform, Office for the Promotion of Regulatory Reform and Private Finance Initiative, Japan Council for Quality in Health Care Center for Medical Accident Prevention (vice-chair).

Prof. Hasegawa's research background includes health policy, health economics, and quality assessment of health care.



Dr Hui (Vivienne) ZHANG

Assistant Professor, Department of Health Policy and Management, Sun Yat-sen University, Chinese Mainland

MSc, PhD

Costs of Hospitalization for Stroke from Two Urban Health Insurance Claims Data in Guangzhou City, Southern China

Dr Zhang is an Assistant Professor in the Department of Health Policy and Management of the Sun Yat-sen University in China. She received her PhD in health economics from The Hong Kong Polytechnic University, and her MSc in economics from The Hong Kong University of Science and Technology.

As a doctoral student, she spent one year as a visiting scholar at the School of Public Health

of the University of California in the Los Angeles (UCLA). Dr Zhang's research focus is health economics, especially health insurance reform, health care financing, health policy evaluation, and cost-effectiveness analysis.



Dr the Honourable LAM Ching-choi, SBS, JP

Chief Executive Officer, Haven of Hope Christian Service; Member of the Executive Council, HKSAR

Primary Healthcare: Enhancing Health and Dignity

Dr Lam is currently the Chief Executive Officer of Haven of Hope Christian Service. He also serves as Chairman of the Elderly Commission and Elderly Care Service Industry Training Advisory Committee as well as Member of the Steering Committee on Primary Healthcare Development and Ex-officio Member of the Family Council. Dr Lam was awarded the Silver Bauhinia Star in 2019.



Dr Christopher Chor-ming LUM

Consultant Geriatrician, Shatin Hospital, Hospital Authority of Hong Kong

MBBS, MPH, MSc, MA

Ageing in Place – Where are We Now and the Challenges Ahead

Dr Christopher Lum Chor-ming received his bachelor's degree in Medicine and Surgery from The University of Hong Kong and his master's degree in Public Health from The Chinese University of Hong Kong. He is also a Fellow of Hong Kong Academy of Medicine, Royal College of Physicians of Australasia, Royal College of Physicians of Edinburgh and Royal College of Physicians and Surgeons of Glasgow. Currently, Dr Lum is a Consultant of the Medical & Geriatric Unit in Shatin Hospital and the Chairman of Specialty Board in Geriatric Medicine in the Hong Kong College of Physicians. He also has experience in delivery management training workshops for executive organised by the Hospital Authority, such as Leadership Greatness Workshop, Thinktoys – Creative Thinking Workshop, LEAN Overview for Senior Executives / Managers and Project Planning & Control.



Ir Dr Eric TAM

Associate Dean of Students / Head of Office of Student Resources and Resident Life / Assistant Professor, Department of Biomedical Engineering, The Hong Kong Polytechnic University

BSc, MSc, PhD

"Gerontechnology: Solution to Successful Ageing?"

Ir Dr. Eric W. C. Tam received his bachelor degree in Engineering Physics from McMaster University, Canada and MSc degree in Biomedical Engineering from University of Saskatchewan, Canada in 2004 and 2006 respectively. Dr. Tam gained his PhD from the Hong Kong Polytechnic University in 2003. Dr. Tam is now the Director of the Jockey Club Rehabilitation Engineering Centre and Assistant Professor of the Department Biomedical Engineering, The Hong Kong Polytechnic University. Dr. Tam is also the Associate Dean of students and the Head of the Office of Student Resources and Residential Life. Ir Dr. Tam has over twenty years of experiences in providing assistive technology services to the local community. His professional interests included the application of Assistive Technologies for elderly and the disabled, Environmental Accessibility as well as the Etiology and Prevention of Pressure Ulcer.



Ms Samantha Yuen Chun CHONG

President, Hong Kong College of Nursing and Health Care Management; Associate Professor (Nursing Practice), School of Nursing, The University of Hong Kong

MEd, MSc (Health Care Management), MCS (Counselling), BHSc (Nursing), RM, RN, FHKAN (Education & Research – Education), FHKAN (Nursing & Health Care Management), FHKCHSE, FACHSM, AFHKPCA

"Healthy Death: Will It be a Solution for Challenge of Ageing Population in Hong Kong?"

Ms Samantha Yuen Chun CHONG is currently an Associate Professor (Nursing Practice) in School of Nursing and Nursing Director, HKU Health System under LKS Faculty of Medicine.

She has been working in both public and private healthcare sectors since 1977 as a Student Nurse, Registered Nurse, Registered Midwife, Head Nurse, Nursing Officer, Nurse Counsellor, Nurse Specialist, Senior Nursing Officer, Executive Partner, Deputizing Department Operations Manager, Senior Nurse Manager, Chief Nursing Officer with experience in clinical services, professional education, nursing management and hospital

administration in acute, convalescent and rehabilitation hospitals as well as clinics and centers.

Apart from nurturing younger generations and influencing potential nursing leaders to be a competent, caring, holistic and person-centered nurse, she is also interested in evidence-based and applicable research, Chinese-Western integrative nursing, quality, safety and risk management, leadership and management, clinical mentorship, health education and promotion, on-line learning, elderly and dementia care, bereavement oncology palliative and end of life care, breastfeeding and depression, care for carer, occupational safety and health, mental health wellbeing, voluntary and community services.

She hopes through the concerted efforts among school educators, clinical staff and hospital managers, the healthcare team as a whole can provide safe, quality, loving and professional care to the people they serve.

Moderators of Keynote and Plenary Presentations



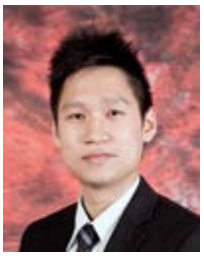
Professor Peter P. YUEN

Dean, College of Professional and Continuing Education (CPCE), Professor, Department of Management and Marketing, The Hong Kong Polytechnic University



Professor Wu LIU

Professor and Head of Department of Management and marketing, The Hong Kong Polytechnic University



Dr Simon T. Y. CHEUNG

Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE



Dr Vincent T. S. LAW

Senior Lecturer, Division of Social Sciences, Humanities and Design, PolyU CPCE; Academic Convenor, Centre for Ageing and Healthcare Management Research (CAHMR), PolyU SPEED



Ms Samantha Yuen Chun CHONG

President, Hong Kong College of Nursing and Health Care Management



Professor Warren C. K. CHIU

Associate Dean, College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University



Dr Jack M. K. LO

Director, PolyU SPEED



Dr Artie W. NG

Principal Lecturer and Deputy Director, PolyU SPEED



Dr Adam K. L. WONG

Senior Lecturer, Division of Science, Engineering and Health Studies and Programme Director, PolyU CPCE



Professor Geoffrey LIEU

Founder and the Chairman Emeritus, Institute for Health Policy and System Research

Facilitator of the Discussion Session



Dr Ben Y. F. FONG

Senior Lecturer and Associate Division Head, Division of Science, Engineering and Health Studies and Programme Director, PolyU CPCE; Director, Centre for Ageing and Healthcare Management Research (CAHMR), PolyU SPEED

Moderators of Parallel Sessions

Session A: Ageing and Health Policy



Dr Florence H. C. HO

Senior Lecturer, Division of Business and Hospitality Management, PolyU CPCE



Dr Carrie H. S. WONG

Senior Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE

Session B: Service Delivery and Care



Dr Daisy S. M. LEE

Senior Lecturer, Division of Business and Hospitality Management, PolyU CPCE



Dr Karly O. W. CHAN

Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE

Session C: Community Health with Dignity



Ms Alisa K. P. WONG

Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE



Mr Tommy K. C. NG

Project Associate, Centre for Ageing and Healthcare Management Research, PolyU SPEED

Session D: Application of Technology in Aged Health and Safety



Dr Fowie S. F. NG

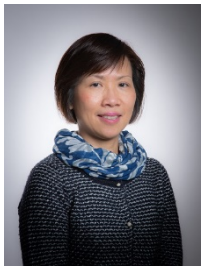
Academic Convenor, Hong Kong College of Health Service Executives (HKCHSE)



Ms Inez Y. S. WU

Council Member, Hong Kong College of Health Service Executives (HKCHSE)

Session E: Health in Greater Bay Area



Dr Idy C. Y. FU

Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE



Dr Tiffany C. H. LEUNG

Assistant Professor, City University of Macau; Member, Centre for Ageing and Healthcare Management Research, PolyU SPEED

Session F: Service Learning and Ageing



Miss Billie S. M. CHOW

Senior Lecturer, Division of Business and Hospitality Management, PolyU CPCE



Mr Patrick K. C. CHAN

Lecturer, Division of Social Sciences, Humanities and Design, PolyU CPCE

Programme Rundown

Time	Event
9:00 am – 9:30 am	**Registration and Coffee**
9:30 am – 9:45 am	**Welcoming Remarks** **Professor Peter P. YUEN** *(Dean, PolyU CPCE)*
KEYNOTE PRESENTATIONS I - VI	
9:45 am – 10:10 am	***East Asian Position in World Ageing and Health & Social Transition*** **Prof. Toshihiko HASEGAWA** *(President, Future Health Research Institute, Japan)* Moderator: **Prof. Peter P. YUEN, Dean, PolyU CPCE**
10:10 am – 10:35 am	***Tax-based Health Financing Sustainability: Examining the Effects of Demographics, Medical Inflation and Economic Growth in Hong Kong by 2039*** **Prof. Peter P. YUEN** *(Dean, PolyU CPCE)* Moderator: **Prof. Wu LIU, Professor and Head, Department of Management and Marketing, PolyU**
10:35 am – 11:00 am	***Innovative Patient Access Schemes to New Pharmaceuticals for the Elderly*** **Prof. Kenneth K. C. LEE** *(Professor of Pharmacy, School of Pharmacy, Monash University Malaysia)* Moderator: **Dr Simon T. Y. CHEUNG, Lecturer, PolyU CPCE**
11:00 am – 11:25 am	**Morning Tea Break**
11:25 am – 11:50 am	***Bridging Health Care and Social Care for Elderly in Korea*** **Prof. Dongwoon HAN** *(Professor, College of Medicine, Hanyang University, South Korea)* Moderator: **Dr Vincent T. S. LAW, Senior Lecturer, PolyU CPCE**
11:50 am – 12:15 pm	***Social and Health Sector Reform towards 2040 in Japan*** **Prof. Tomonori HASEGAWA** *(Professor, Toho University School of Medicine, Japan)* Moderator: **Ms Samantha Y. C. CHONG, President, Hong Kong College of Nursing and Health Care Management**
12:15 pm – 12:40 pm	***Costs of Hospitalization for Stroke from Two Urban Health Insurance Claims Data in Guangzhou City, Southern China*** **Dr Hui (Vivienne) ZHANG** *(Assistant Professor, Sun Yat-sen University, Chinese Mainland)* Moderator: **Prof. Warren C. K. CHIU, Associate Dean, PolyU CPCE**
12:40 pm – 2:00 pm	**Lunch** *(Venue: Hall Restaurant, PolyU Hung Hom Student Halls of Residence)*
PLENARY SESSIONS I - III	
2:00 pm – 2:20 pm	***Ageing in Place – Where Are We Now and the Challenges Ahead*** **Dr Christopher Chor-ming LUM** *(Consultant Geriatrician, Shatin Hospital, Hospital Authority of Hong Kong)*

Moderator:
Dr Jack M. K. LO, Director, PolyU SPEED

2:20 pm – 2:40 pm ***Gerontechnology: Solution to Successful Ageing?***
Ir Dr Eric TAM *(Assistant Professor, Department of Biomedical Engineering, PolyU)*

Moderator:
Dr Artie W. NG, Principal Lecturer and Deputy Director, PolyU SPEED

2:40 pm – 3:00 pm ***Healthy Death: Will It be a Solution for Challenge of Ageing Population in Hong Kong?***
Ms Samantha Y. C. CHONG *(President, Hong Kong College of Nursing and Health Care Management, Hong Kong)*

Moderator:
Dr Adam K. L. WONG, Senior Lecturer, PolyU CPCE

KEYNOTE PRESENTATION VII

3:00 pm – 3:25 pm ***Primary Healthcare: Enhancing Health and Dignity***
Dr The Honourable LAM Ching-choi, SBS, JP *(Chief Executive Officer, Haven of Hope Christian Service, Hong Kong; Member of the Executive Council, HKSAR)*

Moderator:
Prof. Geoffrey LIEU, Founder and the Chairman, Institute for Health Policy and System Research

3:25 pm – 3:50 pm **Discussion**

Facilitator:
Dr Ben Y. F. FONG, Senior Lecturer and Associate Division Head, PolyU CPCE

3:50 pm – 4:15 pm **Afternoon Tea Break**

PARALLEL SESSIONS A - F

4:15 pm – 5:45 pm

Session A: Ageing and Health Policy
Moderators: **Dr Florence H. C. HO** (Senior Lecturer, PolyU CPCE) & **Dr Carrie H. S. WONG** (Senior Lecturer, PolyU CPCE)

(1) ***Estimating Social Burden of 3 Major Diseases including LTC in Japan - Super-aging Society Changes the Breakdown of Burden*** (Koki HIRATA, Kunichika MATSUMOTO, Tomonori HASEGAWA, *Toho University School of Medicine*)
(2) ***Ageing with Health and More Quality of Life: Not Just a Wishful Perspective BUT a Goal That Can be Achieved*** (Christine Y. T. LAM, *Haven of Hope Christian Service*; Florence H. C. HO, *PolyU CPCE*)
(3) ***The Use of Health Care Voucher by Elderly for Services in a Primary Care Organization*** (Joyce S. F. TANG, Ruby L. K. LAI, Maggie Y. L. CHU, Peter K. F. HO, *United Christian Nethersole Community Health Service*)
(4) ***Health Worker Home Visit Effect on Elderly Health*** (Joyce S. F. TANG, Jenny W. M. CHEUNG, Peter K. F. HO, *United Christian Nethersole Community Health Service*)
(5) ***An Assessment Framework for Private Hospitals' Social Responsibility*** (Edmund T. M. WUT, *PolyU CPCE*)

Session B: Service Delivery and Care
Moderators: **Dr Daisy S. M. LEE** (Senior Lecturer, PolyU CPCE) & **Dr Karly O. W. CHAN** (Lecturer, PolyU CPCE)

(1) ***Introduction of an Assistant Workforce to Enhance Older People's Care in Emergency Department*** (Jane CONWAY, *University of New England;* Carolyn HULLICK, *Hunter New England Local Health District*)

(2) ***Perceived Medical Quality and Well-being Perception of Senior Tourists*** (Pimtong TAVITIYAMAN, *PolyU CPCE;* Wanlanai SAIPRASERT, *Chiang Mai University*)

(3) ***Effectiveness of Rheumatology Pharmacist Counseling Service in Improving Medication Adherence and Disease Activity of Arthritis Patients*** (Shirley YIP, *United Christian Hospital*; Gary C. H. CHONG, *United Christian Hospital*; Daisy S. M. LEE, *PolyU CPCE*)

(4) ***Retrospective Evaluation on Patient Screening and Counseling Service on Direct-acting antivirals against Hepatitis C*** (Bob K, H. WONG, *Prince of Wales Hospital*; Gary C. H. CHONG, *United Christian Hospital*)

(5) ***A Randomized Controlled Trial: Vibration Therapy Improves Postural Stability and Prevents Falls after Distal Radius Fracture in Elderly Patients*** (Percy W. T. HO, *CUHK*; Ning TANG, *Prince of Wales Hospital*; Raymond W. K. NG, *Prince of Wales Hospital*; Simon K. H. CHOW, *CUHK*; W. H. CHEUNG, *CUHK*; Ronald M. Y. WONG, *CUHK*)

(6) ***A Pilot Study on the Body Mass Index (BMI) and Percentage Body Fat (PBF) of a Group of College Students*** (Karly O. W. CHAN, Elegance T. P. LAM, Joseph C. H. SO, *PolyU CPCE*)

Session C: Community Health with Dignity

Moderators: **Ms Alisa K. P. WONG** (Lecturer, PolyU CPCE) & **Mr Tommy K. C. NG** (Project Associate, PolyU CPCE)

(1) ***Long-term Exercise Adherence in Community Dwelling Older Americans with Knee Osteoarthritis*** (Corjena CHEUNG, *Hong Kong Adventist College*; Jean WYMAN, Cynthia PEDEN-McALPINE, *University of Minnesota*)

(2) ***A Systematic Review and Meta-analysis of Physical Activity Intervention for Community-dwelling Older Adults*** (Janet L. C. LEE, *HKU*)

(3) ***A Qualitative GIS Investigation in Exploring the Older Adults' Perceptions of Their Exercise Space in the Neighbourhood and the Planned Exercise Space Designed for Them*** (Janet L. C. LEE, Yingqi GUO, Rainbow T. H. HO, *HKU*)

(4) ***Effects of Ving Tsun Martial Art Training on Standing Balance Performance, Leg Muscle Strength, Knee Joint Proprioception and Reaction Time in Community-dwelling Middle-aged and Older Adults*** (Shirley S. M. FONG, *HKU*; Timothy T. T. YAM, *HKU*; Yvonne T. C. CHAK, *Hong Kong Christian Service*; Joyce C. Y. LEUNG, *OUHK*; William W. N. TSANG, *OUHK*)

(5) ***Ageing Pattern and Functioning Abilities among Adults with Intellectual Disability in Residential Setting in Hong Kong: Exploring the Need of Early Elderly Services*** (Phil W. S. LEUNG, Virginia H. C. LEUNG, Doris S. C. LEUNG, Oliver C. K. WONG, M. Y. LAW, Queenie M. W. TAM, Carmen S. O. TSANG, *Have of Hope Christian Service*)

(6) ***Services to Support Dying at Home*** (Bryan P. C. CHIU, *PolyU SPEED*; Ben Y. F. FONG, *PolyU CPCE*)

Session D: Application of Technology in Aged Health and Safety

Moderators: **Dr Fowie S. F. NG** (Academic Convenor, HKCHSE) & **Ms Inez Y. S. WU** (Council Member, HKCHSE)

(1) ***Innovative Virtual Reality Simulation as Practice Tools for Dementia*** (W. K. POON, *CUHK*; B. Y. C. LAU, *IVE (Kwai Chung)*)

(2) ***Comparative Analysis of Policy in End-of-Life Issues in Hong Kong and Macau*** (Fowie S. F. NG, *HKCHSE*; H. C. MA, *Kiang Wu Hospital*)

(3) ***Medical Training with Virtual Reality (VR) for the Aged*** (Y. M. TANG, *PolyU*;

Joseph Y. Y. LAU, *PolyU CPCE*)

(4) ***Deployment of Virtual Reality (VR) to Promote Green Burial*** (Joseph Y. Y. LAU, *PolyU CPCE*; Y. M. TANG, *PolyU*; Adolf K. Y. NG, *University of Manitoba*; Ivy N. M. CHAN, *PolyU CPCE*)

(5) ***Reflection on the Study of Brain Health and Dementia (大腦健康與認知障礙症照顧的個人反思) (黃承志 Leader S. C. WONG, PolyU SPEED)***

Session E: Health in Greater Bay Area

Moderators: **Dr Idy C. Y. FU** (Lecturer, PolyU CPCE) & **Dr Tiffany C. H. LEUNG** (Assistant Professor, City University of Macau)

(1) ***A Tale of Two Cities – A Comparative Study of the Policies and Social Welfare Services for the Elderly in Hong Kong and Macau*** (Ray Y. L. CHOY, *City University of Macau*)

(2) ***Spatial Design and Application of Residential Care in the Smart Community: A Case Study of Guangzhou City (智慧社區居家養老平台空間設計與實現 — 以廣州市為例)*** (江瑜 Yu JIANG、梁靜嫻 Tiffany C. H. LEUNG, *City University of Macau*)

(3) ***The Influence of Attachment on Subjective Well-being of Elderly Couples -- the Mediating Effect of Emotion Regulation Strategies (長者夫妻依戀對主觀幸福感的影響 —— 情緒調節策略的中介作用)*** (李儀嘉 Yijia LI、蔡遠寧 Ray Y. L. CHOY, *City University of Macau*)

(4) A System Study of the Quantity of Health Service for Disabled Elders and Social Support: Case Study of Chengdu (城市失能長者衛生服務數量與社會支持系統研究——以成都市為例) (王芷璿 Zhixuan WANG, City University of Macau)

Session F: Service Learning and Ageing

Moderators: **Miss Billie S. M. CHOW** (Senior Lecturer, PolyU CPCE) & **Mr Patrick K. C. CHAN** (Lecturer, PolyU CPCE)

(1) ***Achieving Elder's Ego Integrity by Instrumental Reminiscence Intervention (IRI)*** (Morris W. K. LEUNG, *Sik Sik Yuen*)

(2) ***Providing Elderly Care through Service-Learning: A Case Study and Proposal to Generate Subject Ideas in an Effective Manner*** (Patrick K. C. CHAN, *PolyU CPCE*)

(3) ***Community Ageing with Health and Dignity through a Service Learning Initiative*** (Ben Y. F. FONG, *PolyU CPCE*; Hilary H. L. YEE, *PolyU SPEED*; Tommy K. C. NG, *PolyU SPEED*; Billie S. M. CHOW, *PolyU CPCE*)

(4) ***Treasure in Elderly Home – A Service Learning Experience at Ho Wong Neighborhood Centre for Senior Citizens*** (Roderick C. H. FUNG, *PolyU SPEED*)

(5) ***Active Ageing 開心 Share: to Solicit Solutions to Ageing from a Multidisciplinary Perspective*** (Ada L. H. NG, Louis K. L. TONG, Cecily K. K. PANG, CK C. K. NG, *PolyU Institute of Active Ageing*)

IV. KEYNOTE PRESENTATIONS

Keynote I: East Asian Position in World Ageing and Health & Social Transition

Professor Toshihiko HASEGAWA

President, Future Health Research Institute, Japan

Correspondence: Professor Toshihiko Hasegawa (pxn14573@nifty.com)

Abstract

Heath sector and society as the whole of the world are under great transition. Particularly East Asia is the hottest spot due to the very rapid ageing. Korean government reported the shocking estimate of Korean ageing as 46.5% at 2067, the rate of population age over 65. The country with almost half elderly population is regarded as unsustainable by common sense. Japan has been regarded as the lonely marathon runner of ageing but not anymore. Korean will be the first runner in 25 years and Taiwan in 35 years. Hong Kong, Singapore, Thailand and coastal area of China will follow. This area has been pushing world economic growth which will push the world aging. In 2015 there were only 3 countries, Japan Italy and Germany as super-aged society but 95 of 201 half world countries in 2060. East Asian countries are the historical experimental countries for the aged society human being never experienced. Ageing in East Asia is rapid in first half of the 21 century and in South-East Asia, South Asia in second half but in next century in Africa. The experience and its exchange of East Asia is very precious for the rest of the world.

Japan will lead the transition called “Demographic Drift” which calls for the drastic change in social design and value from 19 to 21 century-type. Care should be shifted from one episode care which is common in young population to “ Care Cycle” for the elderly. This cyclic feature of care is the essential for “Humanistic, Holistic and Integrated Model of Care” The goal of care also should be shifted from cure of disease or prevention of death to improvement of quality of life and quality of death.

“Dragonnet” cerebrating 21st year of establishment becomes more useful and important instrument for those exiting investigation. And newly published book series of health sector reform in Japan, China, Taiwan and Korea are very helpful.

Keynote II: Tax-based Health Financing Sustainability: Examining the Effects of Demographics, Medical Inflation and Economic Growth in Hong Kong by 2039

Profesor Peter P. YUEN

Dean, College of Professional and Continuing Education (CPCE);
Professor, Department of Management and Marketing, The Hong Kong Polytechnic University

Correspondence: Professor Peter P. Yuen (mspeter@cpce-polyu.edu.hk)

Abstract

The sustainability of tax-based health care financing has always been questioned. The decline in government tax revenue as a result of the shrinkage of the labor force associated with population aging is an obvious concern. This study examines the case of Hong Kong, in which 90 percent of its hospitals depend almost entirely on funding from general government revenue. It first presents longitudinal data on the financing mix, and performance indicators of the health care system. A model is constructed using projections of the overall population, the elderly population, medical inflation, and different rates of economic growth to determine whether or not public funding will be adequate in twenty years' time to maintain the existing level of expenditure. The results suggest that if the territory can maintain, for the next twenty years, the same rate of economic growth as in the past twenty years, it will have adequate funding to maintain the current level of public health care expenditure. If the growth rate is reduced by half, deficit will appear and the quality of care is likely to suffer.

Keynote III: Innovative Patient Access Schemes to New Pharmaceuticals for the Elderly

Professor Kenneth K. C. LEE

Professor of Pharmacy, School of Pharmacy, Monash University Malaysia

Correspondence: Professor Kenneth Lee (kenneth.lee@monash.edu)

Abstract

Attaining modern health care outcomes is increasingly challenging in the context of an aging population, financial constraints, rapidly emerging new technologies, rising expectations and cost of care delivery.

Given this upward pressure on healthcare budgets, decision making in balancing total spend on pharmaceuticals with the imperative to provide timely access to new medicines will be a critical priority especially for the elderly. Payers increasingly demand value for money by requesting formal submissions of a cost-effectiveness analysis as part of the process of formulary listing. In an effort to improve efficiency of rising healthcare expenditure, many systems evaluate whether expected additional benefits of a new technology justify its additional cost compared to existing treatment. There has always been considerable uncertainty at product launch about the ultimate real-world clinical and economic performance of new medical products. If the resources available for healthcare are limited, then approving a more costly technology will displace other activities that would have otherwise generated improvements in health for other patients. Against the backdrop of the ambient uncertainties, healthcare payers have been increasingly looking into innovative reimbursement approaches to balance the need to provide and contain the budget.

Innovative patient access schemes (IPAs) are formal agreements between payer and manufacturers with the aim of sharing the financial risk due to uncertainty surrounding the

introduction of new technologies. IPAs are often known as ‘managed entry agreements (MEAs). Two main classes of MEAs are those with purely financial-based arrangements and those that place more emphasis on clinical performance. Financial-based agreements provide discounts, dose capping or free doses at patient or population levels. Outcome based agreements provide reimbursement or refunds based on outcomes.

Importance of IPAs is growing as they often offer a timely option for systems to allow some patients early access to technologies which the systems may not otherwise fund. Little experience with IPA schemes is found in Asia although this is often provided as an option in many western countries. The focus of this talk is to introduce the concepts and some of the IPA schemes that are available in the Asia Pacific region with a view to enhance understanding of the roles of IPA and inform future health care policy developments in Hong Kong.

Keynote IV: Bridging Health Care and Social Care for Elderly in Korea

Professor Dongwoon HAN

Professor, College of Medicine, Hanyang University, South Korea

Correspondence: Professor Dongwoon HAN (dwhan@hanyang.ac.kr)

Abstract

Increasing aging population is a public concern. The elderly are an important population served by community care, because of both the greater complexity of their care and their worse outcomes in comparison with younger adults. The care they receive at and after using health care plus referral to appropriate community-based services can affect their outcomes in their life. Community care is a favored way of supporting disabled and older people in many countries. Thus, the need for community care is increasing as the demand for care.

Nowadays, the themes shaping community care in Korea are very similar to priorities in many other countries. However, the arrangements for funding and delivering community care for bridging health care and social care as a service vary between countries and welfare systems. Many countries try to improve the efficiency of community care services, especially at their interfaces with social care. However, the effectiveness of all these policies is threatened by various factors to meet both current and projected future demand.

This presentation focuses on the development of community care policies and practice in Korea. We also introduce some issues of the early stage community care initiatives that hold the promise of making contributions to the well-being and independence of the older population in Korea.

Keynote V: Social and health sector reform towards 2040 in Japan

Professor Tomonori HASEGAWA

Professor and Chair, Division of Health Policy and Health Service Research Department of Social Medicine, Toho University School of Medicine, Japan

Correspondence: Professor Tomonori Hasegawa (tommie@med.toho-u.ac.jp)

Abstract

After the World War II, Japanese society experienced two baby booms (1st: 1947-1949, 2nd: 1971-1974). After the second baby boom, the number of newborns has been constantly decreasing. There were about 2.1 million newborns in 1973, and only 0.9 million newborns in 2018. The impact of aging in Japan we are experiencing now is exaggerated by the rapid increase of the elderly (most of them are 1st baby boomers), but their children (2nd baby boomers) can take care of their parents as informal care givers. In 2040, the 2nd baby boomers will go into old old stage (age=>75), and informal family care is hardly expected.

In an aging society, disease structure will change and patients are likely to have more than one diseases (multiple chronic conditions). Elderly people feel difficulty in changing living places and community-based care is essential. Japanese government proposed the concept of community-based integrated care system in 2015. The Reform Plan of Medical and LTC (long-term care) services followed, and it aims to improve the effectiveness of medical and LTC services by 5% through 1) promotion of application of robots, AI, ICT, including data health reform, 2) developing human resources for task shifting/sharing and promoting the use of senior human resources, 3) organizational management reform, and 4) enlargement of service providers and collaboration. It is evident that the manpower is the most serious limitation in maintaining health care system.

Salient features of the Japanese healthcare system in 2040 are as follow:

1: From acute care hospital to chronic care hospital or home health care

2: Aim of healthcare is management of the individual patient rather than cure

3: Role of the doctor is a playing manager of a medical team

4: New concept formation and social consensus are required for quality management, safety management, and evidence building

5: Increasing role of telemedicine and remote medicine

My presentation will explain about the two governmental plans with backgrounds, focus on several topics relating the plans, and foresee the future trends.

Keynote VI: Costs of Hospitalization for Stroke from Two Urban Health Insurance Claims Data in Guangzhou City, Southern China

Dr Hui (Vivienne) ZHANG

Assistant Professor, Sun Yat-sen University, School of Public Health, Guangzhou, China

Correspondence: Dr Vivienne ZHANG (zhanghui3@mail.sysu.edu.cn)

Abstract

Background: Stroke remains a major global health problem. In China, stroke was the leading cause of death and imposed a large impact on the healthcare system. This study aimed to examine the hospitalization costs by five stroke types and the associated factors for inpatient costs of stroke in Guangzhou City, Southern China.

Methods: This was a prevalence-based, cross-sectional study. Data were obtained from urban health insurance claims database of Guangzhou city. Samples including all the reimbursement claims submitted for inpatient care with the primary diagnosis of stroke from 2006 to 2013 were identified using the International Classification of Diseases codes. Descriptive analysis and multivariate regression analysis based on the Extended Estimating Equations model were performed.

Results: A total of 114,872 hospitalizations for five stroke types were identified. The average age was 71.7 years old, 54.2% were male and 60.1% received medical treatment in the tertiary hospitals, and 92.3% were covered by the urban employee-based medical insurance. The average length of stay was 26.7 days. Among all the hospitalizations (average cost: Chinese Yuan (CNY) 20,203.1= $3,212.1), the average costs of ischaemic stroke (IS), subarachnoid haemorrhage (SAH), intracerebral haemorrhage (ICH), transient ischaemic attack (TIA), and other strokes were CNY 17,730.5, CNY 62,494.2, CNY 38,757.6, CNY 10,365.3 and CNY 18,920.6, respectively. Medication costs accounted for 42.9%, 43.0% and 40.4% of the total inpatient costs among patients with IS, ICH and TIA, respectively, whereas for patients with SAH, the biggest proportion of total inpatient costs was from non-medication treatment costs (57.6%). Factors significantly associated with costs were stroke types, insurance types, age, comorbidities, severity of disease, length of stay and hospital levels. SAH was linked with the highest inpatient costs, followed by ICH, IS, other strokes and TIA.

Conclusions: The costs of hospitalization for stroke were high and differed substantially by types of stroke. These findings could provide economic evidence for evaluating the cost-effectiveness of interventions for the treatment of different stroke types as well as useful information for healthcare policy in China.

Keywords: stroke, cost, hospitalization, China, health insurance, cost of illness

Keynote VII: Primary Healthcare: Enhancing Health and Dignity

Dr LAM Ching-choi, SBS, JP

Chief Executive Officer, Haven of Hope Christian Service; Member of the Executive Council, HKSAR

Correspondence: Dr LAM Ching-choi (drcclam@hohcs.org.hk)

Abstract

While Hong Kong faces challenges in managing an ageing population and the pressure of increasing prevalence of chronic diseases, its people are mostly relying on cure-oriented healthcare services. To promote prevention-focused healthcare and shift the emphasis of the present healthcare system, primary healthcare is advocated as the reformative way to enhance the public's awareness and capability in self-management of health and provide constant support for chronic patients. Through screening and intervention, patients may adjust their lifestyle habits so to reduce the risk of diseases and treat it more effectively at an early stage. Meanwhile, the trans-disciplinary team approach facilitated collaboration between professionals, thus comprehensive and whole-person care could be provided to meet the multi-faceted needs of patients to bring a better care outcome.

As the Chief Executive proposed setting up District Health Centre as the one-stop service hub to provide health promotion, consultation and chronic disease care services, it is expected that the pressure on public hospital can be alleviated and the current focus of the healthcare services can gradually shift to the district-based, prevention-focused model. Furthermore, with the support of technology, self-management of patients could be empowered in three ways: patient communication, patient education and tracking of patient-generated health data. Patients can be empowered as partners and become actively engaged in taking responsibility for caring for their own health and hence, work together with healthcare professionals to determine the most appropriate treatment or care choices.

Through restructuring the healthcare system and empowering patients to care for their own health, patients can monitor their own condition and make lifestyle changes needed to maintain a healthy state so to delay institutionalization and prevent the loss of autonomy, thus maintaining and enhancing their quality of life. Most importantly, strengthening primary healthcare services would improve efficiency in the utilization of healthcare resources and ensure sustainable and affordable healthcare for all.

V. PLENARY SESSIONS

Plenary I: Ageing in Place – Where are We Now and the Challenges Ahead

Dr Christopher Chor-ming LUM

Consultant Geriatrician, Shatin Hospital, Hospital Authority of Hong Kong

Correspondence: Dr Christopher Chor-ming LUM (lumcm@ha.org.hk)

Abstract

Institutionalization deprives one from his or her personal choice and freedom. To be able to live in one's own familiar environment with familiar faces, and with personal choices on daily activities and routines would be ideal. This is the underpinning principle to "Ageing in Place". The living may be easy if one is physically able and cognitively sound as in the state of healthy ageing. With advancement in age, intrinsic capacity and bodily reserves fall, functional limitations come in. Environmental modifications, assistive device or personal care assistance may be required to live in community. In this session, we are to review the needs of a senior with ageing process and examples of work to maintain them an independent living. We shall also review current services that assist devoted care-givers in supporting a disabled senior to remain in the society. Gaps in such services, potential models and challenges to be overcome will be discussed.

Plenary II: Gerontechnology: Solution to Successful Ageing?

Ir Dr Eric TAM

Associate Dean of Students / Head of Office of Student Resources and Resident Life / Assistant Professor, Department of Biomedical Engineering, The Hong Kong Polytechnic University

Correspondence: Ir Dr Eric TAM (eric.tam@polyu.edu.hk)

Abstract

The emergence of gerontechnology has brought high hopes to older people who would like to live an independent, healthy and secure life. However, the penetration of technology usage among elderlies remains to be low. This could be due to the unawareness of the benefit and availability of the technologies, the lack of confidence in using these devices, affordability and after sales support or simply a mis-match between the technology and the user. To address these barriers, it is essential to bring together all stakeholders: carer/end-users, researchers, developer and manufacturers of gerontechnologies. Through collaborative efforts, technology integration among elderlies can hopefully be attained. In this presentation, the work of our newly established Smart Ageing Hub will be introduced together with our experience in the development of our e-Nightlog System which aims to provide unobtrusive monitoring for individual with dementia.

Plenary III: Healthy Death: Will It be a Solution for Challenge of Ageing Population in Hong Kong?

Samantha Yuen Chun CHONG

President, Hong Kong College of Nursing and Health Care Management; Associate Professor (Nursing Practice), School of Nursing, The University of Hong Kong

Correspondence: Ms Samantha Yuen Chun CHONG (samanthachong@hku.hk)

VI. PARALLEL SESSIONS

Parallel Session A: Ageing and Health Policy

A1. Estimating Social Burden of 3 Major Diseases including LTC in Japan - Super-aging Society Changes the Breakdown of Burden

Koki HIRATA [1], Kunichika MATSUMOTO [2], Tomonori HASEGAWA [2*]

[1] *Toho University Graduate School of Medicine, Department of Social Medicine, Japan*

[2] *Toho University School of Medicine, Department of Social Medicine, Japan*

* Corresponding author: Professor Tomonori Hasegawa (tommie@med.toho-u.ac.jp)

Abstract

Background: The aging of Japan is the most advanced in the world with increasing medical demands. Under such circumstances, to reallocate limited medical resources, it is important to estimate medical demand appropriately. The progress of aging also changes the disease structure. Chronic diseases, which have been increasing in recent years, have a higher burden of long-term care (LTC) than conventional acute diseases. In addition, although public LTC insurance system was introduced in 2000, it is said that the burden of informal care by families is also large. The burden of informal care has caused various social problems such as leaving the job due to LTC for family members.

In consideration of such situation, we estimated the social burden of three major diseases in Japan: cancer, heart disease, cerebrovascular disease (CVD). We also estimated the case where the informal care burden shifted to services provided by paid caregivers through the market.

Method: Modifying the Cost of illness (COI) method developed by Rice D, we newly defined and estimated Comprehensive-COI (C-COI) of cancer (ICD10 code: C00-D09), heart disease (I01-I02.0, I05-I09, I20-I25, I27, and I30-I52), and CVD (I60-I69). C-COI consists of five parts; medical direct cost, morbidity cost, mortality cost, LTC direct cost and informal care cost.

Informal care cost is “unpaid care cost” by family or relatives in-home and in-community, and is calculated by two approaches. Opportunity cost approach uses the earnings of the caregiver itself. We used average income of caregivers classified by their age and sex. Replacement approach assumes that an informal caregiver is substituted by a paid caregiver who provides the same type of care services. We used prevailing wage of caregivers. We compared these two approaches for cerebrovascular disease.

Results: C-COI of cancer, CVD and heart disease in 2014 amount to 9.8 trillion JPY, 6.5 trillion JPY, and 4.5 trillion JPY, respectively. As for composition of C-COI, the mortality cost occupied the largest part for cancer (63.5%) and heart disease (50.6%), but the direct cost (LTC) occupied the largest part for CVD (26.7%). Cost of LTC for CVD was 11.1 times of that of cancer and 6.2 times of that of heart disease.

C-COI of CVD in opportunity cost approach was 6.50 trillion JPY and in replacement

approach was 7.46 trillion JPY.

Conclusion: It was shown that the proportion of LTC in the C-COI of CVD is larger compared to 2 acute illness; cancer and heart disease. It suggests that the burden of LTC can occupy significant part when assessing the burden of chronic disease.

Informal care cost of CVD calculated by replacement approach is about 1.5 times as much as the cost calculated by opportunity cost approach. This reflects that average age of family caregivers is older than that of paid caregivers. Currently elderly people often take care of elderly family members (elderly-elderly care), and this form of care is difficult to continue because of the shortage of manpower in households. Dependence on paid caregivers will increase, and the social burden of chronic disease may increase.

A2. Ageing with Health and More Quality of Life: Not Just a Wishful Perspective BUT a Goal That Can be Achieved

Christine Y. T. LAM [1], Florence H. C. HO [2*]

[1] *Haven of Hope Christian Service, Hong Kong*

[2] *Division of Business and Hospitality Management (BHM),College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong*

* Corresponding author: Dr Florence H. C. HO (florence.ho@cpce-polyu.edu.hk)

Abstract

According to WHO, between 2015 and 2050, the proportion of the world's older adults is estimated to almost double from about 12% to 22%. While a healthy lifestyle and preventive healthcare have increased life expectancy, but they cannot stop the ageing process that goes hand in hand with the decrease of the older adults' physical as well as mental capacities.

Older adults need support from the infrastructure they use. In the case where nursing or basic care from family might not be readily available for one reason or another, or they are faced with life-threatening illnesses or other significant change in health status, we are seeing the number of older adults suffering from geriatric diseases rises, and consequently more and more will need medical support and daily life assistance.

Faced with medical crises, they might become too ill to make their own healthcare decisions, or when different family members might have conflicting opinions. It is imperative for older adults to prepare for current and future decisions about their medical treatment and place of care, while they are still in possession of decisional capacity about how treatment decisions should be made on their behalf in the event that they lose their capacity to make such decisions.

Attributed by the inadequacy of end of life care and of the poor knowledge of patients' wish about their medical treatment at a time when they lost the capacity to make decisions,

resulting in patients being cared for in a way that they would not have chosen, tremendous efforts have been devoted to identify more effective measures to overcome such shortfalls. Research studies have shown the main focus to deal with these needs have been the development of advance care planning (ACP), which does not only improve end of life care, and patient and family satisfaction, but also reduces stress, anxiety and depression among family member and relatives.

In this presentation, we will discuss the practical approach of ACP at Haven of Hope Nursing Home. Such facilities may often be considered as a final solution that is usually stalled. But we will learn that it is not just an accommodation fostering older adults who are not able to care for themselves any more, but one which has provided its patients with care, consistent with their values, goals and preferences.

A3. The Use of Health Care Voucher by Elderly for Services in a Primary Care Organization

Joyce S. F. TANG [1], Ruby L. K. LAI [1], Maggie Y. L. CHU [2], Peter K. F. HO [1*]

[1] *Preventive Medicine & Clinical Service Division, United Christian Nethersole Community Health Service, Hong Kong*

[2] *Finance & Accounting Division, United Christian Nethersole Community Health Service, Hong Kong*

* Corresponding author: Mr Philip K. F. HO (peter.ho@ucn.org.hk)

Abstract

Background: The health care voucher (HCV) system of government started in 2009 as a subsidy for elderly aged 65 or above to use on a variety of non-government primary care services to encourage the uptake of preventive health care and reduce burden on hospital services. The amount of HCV available per year has increased from $2,000 (ceiling $4,000) in 2016 to $3,000 (ceiling $8,000) in 2019.

Aim: To examine the use of HCV pattern within United Christian Nethersole Community Health Service Preventive Medicine and Clinical Service Department, a primary care organization, over 3 years

Method (Descriptive analysis): Using data in our clinic management system, we analyzed the use of HCV by elderly patients on our medical, dental and rehabilitative services over 3 years from 2016 to 2019 and looked at the distribution over preventive and curative care. Preventive medical care included health screening and non-government subsidized vaccinations.

Results: Our organization provides purely primary care services in the community. In the 2016 to 2019 period, our services and health manpower were stable with 13 medical doctors,

6 registered nurses in 6 medical clinics, 8 dentists in 6 dental clinics and 1 physiotherapist. Findings suggested the usage rate of HCV was increased in all domains. The number of elderly attendance in medical consultation service using HCV increased from 40.4% to 54.0% of total elderly attendance. A similar trend was observed in health-check service from 9.8% to 13.6% of total elderly attendance. The amount of HCV per claim were $427 for medical consultation, $807 for vaccination, $1,171 for health-check, $537 for dental service, and $297 for physiotherapy. The out-of-pocket payments were $56 for medical consultation, $35 for vaccination, $127 for health-check, $49 for dental service, $29 for physiotherapy.

Conclusion: Findings suggested HCV became more popular in all type of service within our primary care organization. This enabled elderly to take up both curative and preventive care when it is offered. However, when comparing with the territory-wide statistic, the absolute HCV-per-claim in dental service and physiotherapist were lower and the actual out-of-pocket payment in both curative and preventive was lower than the clients' willingness-to-pay (WTP). Nevertheless, we have to consider the factors affecting the WTP then design corresponding services to elderly and promote holistic care in private primary care especially for chronic diseases management and preventive care.

A4. Health Worker Home Visit Effect on Elderly Health

Joyce S. F. TANG, Jenny W. M CHEUNG, Peter K. F. HO*

Preventive Medicine & Clinical Service Division, United Christian Nethersole Community Health Service, Hong Kong

* Corresponding author: Mr Philip K. F. HO (peter.ho@ucn.org.hk)

Abstract

Purpose: To enable community elderly to age in place with dignity and quality of life by correcting potential home hazards, health screening and promotion, medication assessment, and providing referral services.

Background: From 1st November 2017 to 31st October 2018, United Christian Nethersole Community Health Service Preventive Medicine and Clinical Service Department made 935 individual home visits to community elderly aged 65 or above, living alone or as a couple.

Methods: Social workers/doctors in the community referred vulnerable elderly, including those with complex comorbidities. Health care workers visited elderly accommodations and performed home hazards identification, assessed knowledge on medication and lifestyle, conducted simple health screening and fall risk assessment. Health care worker would then provide health education and necessary equipment to achieve the desirable behavior changes or reduce the risk of the hazards. Referral services to relevant health professionals/social services for early intervention were provided. A 6-months follow-up period with phone follow-up in 1-month, 3-months, and 6-months after the initial visit explored the changes in

health knowledge, fall rate, unplanned hospitalization, and the progress of lifestyle modification.

Results: There were 935 participants with 348 male and 587 female aged in-between 64-99. 223 (23.9%) lived alone, 664 (71.0%) lived with spouse. There were 514 (55.0%) and 615 (65.8%) participants had no handrails and non-slippery mat in bathroom respectively. 560 (59.9%) participants did not have Personal Emergency Link at homes.

Upon screening, 74 (8.3%) and 14 (1.5%) have suspected dementia and depression respectively. There were 760 (81.3%) participants were taking long-term medication, 87 (11.4%) did not comply with drug schedule, 108 (14.2%) participants did not understand the drug regime, 55 (7.2%) participants did not store drugs properly, and 18 (2.4%) participants increased dosage without consultation.

Falls risk was assessed using one-leg balance test, walking speed test, semi-tandem stand, and repeated chair stands. At baseline, 90 (9.6%) reported fall and 66 (7.1%) experienced unplanned hospitalization within the past 3 months. In telephone follow-up after 3 months, there were only 13 (2.2%) fall cases and 12 (2.0%) unplanned hospitalization.

Conclusion: Falls risk, unsafe home-environment, and poor medication adherence were found to be the major risks to elderly at home. This medical-social cooperation model was proved its effectiveness in improving the chances of ageing in place.

A5. An Assessment Framework for Private Hospitals' Social Responsibility

Edmund T. M. WUT

Division of Business and Hospitality Management (BHM),College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong

Correspondence: Dr Edmund T. M. WUT (edmund.wut@cpce-polyu.edu.hk)

Abstract

There is a need for private Hospitals to be engaged in corporate social responsibility (CSR) initiatives. Previous studies focus on the impacts of corporate social responsibility practice and there is a literature gap on the assessment of Hospital Social Responsibility (HSR). Existing reporting guidelines seems not adequate apply to the health care organization situations. Global reporting initiatives follow the triple bottom line covering social, environmental and economic areas only. International Organizational for Standards (ISO) 26000 covers more areas: organizational governance; labor practices; environment; fair operating practices; consumer issues; human rights and community involvement and development.

The aim of this study is to propose an assessment matrix from a stakeholder perspective of Hospital Social Responsibility. The operation of a hospital involves a wide range of stakeholders. It would be more sensible to investigate the impacts on stakeholders when

operates of a hospital. Doctors, nurses and supporting staff are needed to maintain hospital's daily operation. Clients are the main source of income. Government is a policy maker regarding private health care organizations. Communities are affected by hospitals' responsibility practices. HSR demonstrates a hospital's voluntary commitment in order to improve the quality of life in its local communities.

Peer hospitals are regarded as competitors and collaborators. Fair competition must be ensured on transparent basis. Cooperation among hospitals includes patient record exchange, referrals among hospitals and best practice sharing. Suppliers provide services and products for supporting hospitals' daily operations. Private hospitals might engage in training doctors and nurses purposes. Last but not least, the physical environment is another important stakeholder. Hospital sustainability is a long term goal. For example, hospital could develop green policy and establish environment management system to monitor daily operations including resource and energy saving, pollution prevention and waste management.

A pilot test was done of this HSR framework to assess the hospital effort based on the related HSR practices on each stakeholder. Impact criteria were developed for stakeholders. According to the available public information, it was found that the HSR assessment framework can differentiate the impacts of HSR across hospitals. It provides a starting point to form a HSR index for rating and benchmarking.

Parallel Session B: Service Delivery and Care

B1. Introduction of An Assistant Workforce to Enhance Older People's Care in Emergency Department

Jane CONWAY [1*], Carolyn HULLICK [2]

[1] *Faculty of Medicine and Health, University of New England, NSW Australia*

[2] *Emergency Physician, Hunter New England Local Health District, NSW Australia*

* Corresponding author: Professor Jane CONWAY (jconway4@une.edu.au)

Abstract

Background: This presentation reports on a strategy to enhance the care of older people in the Emergency Department (ED) through introduction of an assistant workforce in the ED. The assistant workforce was trained to conduct screening to inform assessment by and care planning for older people as well as enhance supportive care activities for prevention of delirium.

Approach: Using a pre-post design, data was collected before and after the introduction of Older Person Technical Assistants (OPTAs) in the ED. OPTA activity was recorded during the intervention period and a medical record audit undertaken prior to and 9 months after implementation. Data were analysed using descriptive statistics for OPTA activities screening scores between OPTAs and Aged Services Emergency Team Registered Nurses were compared. Focus groups were conducted to explore clinicians' experiences of the OPTA role

Outcomes / Results: Three thousand five hundred forty two people were seen by OPTAs in 4563 ED Presentations between 1st July 2011 and 2012. The reproducibility of all screening tools were found to be high between the OPTAs and the RNs, with Kappas and ICCs generally all above 0.9.Documentation of screening significantly improved including pain and cognition as well as oral fluids, food and pressure injury care. There were mixed views of the OPTA role in the ED.

Take Home Message: An assistant workforce in EDs may provide a workforce that can effectively screen and provide supportive care and liberate professional staff to focus on other activity. However this requires a valuing of an assistant workforce in an ED setting and a model of staffing that accommodates this. The presentation discusses the challenge for health service managers in maintaining a skill mix in an ED that is inclusive of an assistant workforce and why this has not continued after the study period.

Keywords: Aged care; acute and emergency care; workforce reform; sustainability

NOTE: Although this presentation has not been previously presented, the data used in the presentation has been included in previous publications.

B2. Perceived Medical Quality and Well-being Perception of Senior Tourists

Pimtong TAVITIYAMAN [1*], Wanlanai SAIPRASERT [2]

[1] *Division of Business and Hospitality Management (BHM), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong*

[2] *Faculty of Business Administration, Chiang Mai University, Thailand*

* Corresponding author: Dr. Pimtong TAVITIYAMAN (pimtong.t@cpce-polyu.edu.hk)

Abstract

This study aims to explore tourists' perception of the medical quality attributes of medical tourism destinations and compare the different perceptions of tourists on medical service attributes, well-being perception and behavioural intention of medical tourism destinations. The results show that respondents perceived the USA to have the most positive medical service quality followed by Japan, Taiwan, Thailand and Malaysia. Meanwhile, respondents perceived China and South Korea to have the least medical service quality. For the medical service attributes, the top three medical attributes are 'the physicians adequately explained my condition, examination results and medical process', 'the physicians paid enough attention to my concerns in deciding on a medical procedure' and 'the physicians allowed me to ask many questions'. For the perceived medical quality attributes, eight out of twenty items (e.g., medical staff was polite and friendly and the physicians adequately explained my condition, and examination results and medical process) are significantly different. Respondents perceived more positive experiences in overseas medical destinations compared to Hong Kong. The managerial implication can be further discussed.

Keywords: Perceived medical quality, well-being, senior tourist, Hong Kong

B3. Effectiveness of Rheumatology Pharmacist Counseling Service in Improving Medication Adherence and Disease Activity of Arthritis Patients

Shirley YIP [1], Gary Chung Hong CHONG [1], Daisy S. M. LEE [2*]

[1] *United Christian Hospital, Hong Kong*

[2] *Division of Business and Hospitality Management (BHM), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong*

* Corresponding author: Dr. Daisy S. M. Lee (daisy.lee@cpce-polyu.edu.hk)

Abstract

Arthritis is a common condition among older people and can cause long term disability and other comorbidities. In Hong Kong, arthritis is the third leading chronic disorder among people aged over 60 years old. Improving control of arthritis would enhance the quality of life of arthritis patients. Previous studies showed that higher medication adherence is significantly associated with lower flare rate and disease activity score, implying good

control of arthritis. While drug education and counseling provided by pharmacists is found to effectively enhance medication adherence, the consequential effect in improving drug adherence and disease activity in arthritis patients is underresearched. Hence, the objective of this study is to evaluate the effectiveness of pharmacist counseling service in improving arthritis patient's medication adherence and disease activities in Hong Kong. This research comprises a 6-month single center open-label prospective study at a pharmacist-led rheumatology clinic. Patients who are diagnosed with rheumatoid arthritis (RA), ankylosing spondylitis (AS) or psoriatic arthritis (PsA) will be recruited from the rheumatology clinic in United Christian Hospital from December 2019 to April 2020 in Hong Kong. Patients will be referred by rheumatologist or rheumatology nurses to participate in the study in a voluntarily basis. The inclusion criteria are RA, AS or PsA patients, on at least one oral disease-modifying antirheumatic drugs (DMARDs) or steroid, who are at least 18 years old, understand Chinese or English and have no cognitive defects.

Outcomes of this study include (i) the improvement in medication adherence of arthritis patients after pharmacist counseling; and (ii) the improvement in disease activity of the patients and its association with the improvement in medication adherence. Compliance Questionnaire on Rheumatology (CQR-19), a self-report questionnaire with 19 questions and validated for measuring medication adherence of patients with rheumatic disease will be used to assess medication adherence in this study. The proportion of patients in the adherence group before and after pharmacist counseling will be compared. Besides, the mean CQR score before and after pharmacist counseling will also be compared. The disease activity of RA and PsA patients will be assessed using Disease Activity Score (DAS-28) and disease activity of AS patients will be measured using Bath Ankylosing Spondylitis Disease Activity Index (BASDAI). Result of this study will contribute to the development of rheumatology pharmacist service and a multidisciplinary care model of rheumatology that aims to enhance control of arthritis and quality of life among arthritis patients.

B4. Retrospective Evaluation on Patient Screening and Counseling Service on Direct-acting antivirals against Hepatitis C

Bob Ka Him WONG [1], Gary Chung Hong CHONG [2]

[1] *Prince of Wales Hospital, Hospital Authority, Hong Kong*

[2] *Department of Pharmacy, United Christian Hospital, Hospital Authority, Hong Kong*

* Corresponding author: Mr Bob Ka Him WONG (wkh440@ha.org.hk)

Abstract

Introduction: Hepatitis C is a contagious liver disease caused by hepatitis C virus (HCV). The major aim of anti-HCV treatment is to prevent liver-related complications, including hepatocellular carcinoma. Conventional interferon-based regimen leads to suboptimal virologic response with significant adverse events. Over the past few years, the introduction of direct-acting antivirals (DAA) has provided more effective yet costly treatment

alternatives. However, drug-drug interactions and risk of hepatitis B reactivation potentially affect patient outcomes. A comprehensive pharmacist screening and counseling service was implemented in United Christian Hospital, which aims to optimize the efficacy and safety of the therapy while minimizing the risk of drug wastage due to unintended prescribing beyond the standard duration.

Service framework: For cases initiated with DAA, pharmacists would perform medication review including drug dosage, intended duration, hepatitis B status, other medical history and medication profile. Patient counseling was provided with medication supplied as refills every 4-6 weeks. Any drug related problems (DRP) identified were documented and managed accordingly.

Methodology: We retrospectively evaluate all cases under provision of care since service initiation from June 2017 to September 2018. Outcomes measured include DRP identified, treatment discontinuation and failure rates.

Results & Discussions: There were 44 cases, with mean age of 62, under the provision of service. All cases completed DAA therapy, except 1 died from advanced cirrhosis during treatment. 3 cases of positive hepatitis B serology were documented with preemptive hepatitis B treatment and/or blood monitoring provided. No cases of hepatitis B reactivation or DAA treatment failure was reported. 25 DRPs were documented, which were predominantly categorized as drug-drug interactions. The interactions commonly involved acid-lowering agents, which are readily available over-the-counter and potentially missed from medical record. 1 case was noted with documented duration longer than standard regimen. Co-morbidities are common, and the associated admissions and multiple follow-ups from other specialties possess risk for unrecognized DRPs. Short medication supplies facilitated early detection and intervention of DRPs, minimizing chance of over-dispensing.

Conclusion: The safety concerns and high cost of DAA have created a new challenge to healthcare providers. Comprehensive screening and counselling are valuable to ensure safe and effective use of DAA in hepatitis C patients, hence reduce unnecessary drug wastage.

B5. A Randomized Controlled Trial: Vibration Therapy Improves Postural Stability and Prevents Falls after Distal Radius Fracture in Elderly Patients

Percy Wing Tung HO [1*], Ning TANG [2], Raymond Wai Kit NG [2], Simon Kwoon-Ho CHOW [1], Wing-Hoi CHEUNG [1], Ronald Man Yeung WONG [1]

[1] *Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong, Hong Kong*

[2] *Department of Orthopaedics and Traumatology, Prince of Wales Hospital, Hospital Authority, Hong Kong*

* Corresponding author: Miss Percy W. T. HO (percy.howt@gmail.com)

Abstract

Introduction: Fractures of the distal radius occur in 15% of women older than 50 years of age. These fractures are a particular health concern amongst the elderly, who are at risk of fragility fractures, and are associated with long-term functional impairment, pain and a variety of complications. This is a sentinel event as these fractures are associated with 2 to 4 times increased risk of subsequent hip fractures in elderly patients. This is also an important concept because it is well established that these patients have an increased risk of falling. Fall prevention is therefore crucial to decrease further morbidity and mortality.

Methodology: A randomized controlled trial investigating effect of 6-months of low-magnitude high-frequency vibration (LMHFV) after a distal radius fracture was conducted. 200 patients were recruited and randomized to control or LMHFV group (35Hz, 0.3g peak-to-peak magnitude, displacement of <0.1mm, 20 min/day, 5 days/week). Primary outcome was postural stability measured by Biodex Balance System. Secondary outcomes were falls, timed up-and-go test (TUG), quadriceps strength, compliance, adverse events, and quality of life (SF-36 questionnaire).

Results: 5 and 6 patients dropped out from control group and LMHFV group respectively. 90% compliance of LMHFV was documented.

There was significant improvement with LMHFV compared to control at 6 months for both static and dynamic stability. Falls occurred significantly less in LMHFV group with 7 times compared to 16 times in control group at 6 months (p=0.05). No adverse events were recorded. TUG test (p=0.02), quadriceps muscle strength (p=0.04), and quality of life in general health (p=0.03) and pain (p=0.05) were significantly improved with LMHFV.

Conclusion and Discussion: Distal radius fractures is one of the earliest fragility fracture and early intervention to prevent imminent risk of falls and fractures is crucial. Previous studies have stressed the importance of reducing falls in distal radius fracture elderly patients, and an effective intervention is crucial. LMHFV improved postural stability and decreased falls in our study. The use of LMHFV can be potentially incorporated in our future Fracture Liaison Services. Positive results will provide a large impact in the prevention of secondary fractures and save healthcare costs.

Acknowledgement: AADO Research Fund (AADO-RF2019-2Y-01).

B6. A Pilot Study on the Body Mass Index (BMI) and Percentage Body Fat (PBF) of a Group of College Students

Karly O. W. CHAN *, Elegance T. P. LAM, Joseph C. H. SO

Division of Science, Engineering and Health Studies (SEHS), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong

* Corresponding author: Dr. Karly O. W. CHAN (karly.chan@cpce-polyu.edu.hk)

Abstract

Obesity, which literally refers to excess body fat, is a growing public health problem and it is

a common risk factor for many chronic diseases such as type 2 diabetes mellitus, hypertension, obstructive sleep apnea and cardiovascular diseases. On the other hand, underweight is also a growing concern for young women. It is associated with malnutrition, anemia and infectious diseases. Body Mass Index (BMI) and percentage body fat (PBF) are two common screening tools for weight categories that may lead to health problems.

The current study aimed to investigate the BMI and PBF of college students and how the two indices were affected by their knowledge in food hygiene and nutrition. It compared (i) the BMI of a group of students with the results of the Population Health Survey 2014/2015 published by the Centre for Health Protection. (ii) the BMI and PBF of students who had studied (S) or had not studied the subject CCN2014 Food Hygiene & Nutritional Health (N).

Data were collected from 1111 Chinese students who studied in PolyU Hong Kong Community College (HKCC) between 2013 and 2017. 71.9% of them were recruited from the subject CCN2014 Food Hygiene & Nutritional Health. The remaining subjects were recruited during a series of healthy lifestyle promotion activities. Body weight, PBF and height were measured with the subject barefoot and wearing light clothing. Continuous data were analyzed with independent t-test. Categorical data were analysed by chi-square test. A p-value of less than 0.05 was interpreted as statistically significant.

Compared with the BMI of the age group 15-24 from the results of Population Health Survey (HS) 2014/2015 in Hong Kong, HKCC students had a lower mean BMI (HKCC: 20.5 kg/m^2 vs HS: 21.2 kg/m^2) and significantly larger proportion of HKCC students were classified as underweight and normal. Compared with S and N groups, there was no significant difference on the mean BMI but the mean PBF was significantly higher in S group in both male and female students (Male PBF S: 17.1±6.6 vs N: 15.7±5.6; Female PBF S:29.5±6.0 vs N:26.3±5.5). Significantly higher percentage of students of S group was classified as obese.

Based on the BMI classification, more participants of this study had healthy body weight. The possible reasons were that our samples were more cohesive with a narrower age range of 17-23, and all of them were students. Higher proportions of students were classified as underweight particularly female students. Studying nutrition for one semester may not have noticeable influence on student's weight and body composition which should be the consequence of long-term diet and lifestyle modification. Proper health promotion plan should be formulated to emphasize on the health effects of healthy body weight.

Parallel Session C: Community Health with Dignity

C1. Long-term Exercise Adherence in Community Dwelling Older Americans with Knee Osteoarthritis

Corjena CHEUNG [1*], Jean WYMAN [2], Cynthia PEDEN-McALPINE [2]

[1] *Health Department, Hong Kong Adventist College, Hong Kong*

[2] *School of Nursing, University of Minnesota, Minnesota, U.S.A.*

* Corresponding author: Professor Corjena CHEUNG (corjena@hkac.edu)

Abstract

Statement of the Problem: Osteoarthritis (OA) of the knee is among the leading cause of disability in older adults worldwide. Exercise such as aerobic/strength exercises (ASE) and Hatha yoga (HA) are recommended for optimal management of knee OA. While there is information on their short-term benefits, little is known about long-term adherence and factors that affect it. The purposes of this study were to: a) compare the difference in adherence between HA and ASE 12 months after an intervention program in community dwelling older Americans, b) describe the characteristics of home HA and ASE practices, and 3) identify factors that affect HA and ASE adherence. Adherence is defined as following the prescribed HA/ASE program at home.

Methodology & Theoretical Orientation: This qualitative study assessed the long-term adherence of an 8-week HA versus ASE program for knee OA. Twenty-eight older Americans (mean age: 71 years) participated in five semi-structured focus group interviews 12 months post-intervention. Transcript-based qualitative content analysis approach was used.

Findings: Although the adherence rate during the 8-week intervention programs was ≥50%, adherence to the prescribed level of HA or ASE regimen (30 minutes/day, 5 days/week) during the 1-year follow-up was poor and episodic. The majority of participants incorporated only selected HA poses/ASE learned in class into their own exercise habit. Participants in the HA group reported experiencing mind-body benefits which motivated them to practice: reduced knee pain and swelling, improved muscle tone, increased flexibility, better stress coping, and more relaxation. Additional motivators include having a routine and family support. Caretaker responsibility, lack of structure, unsure of accuracy of poses, time constraints, and health issues prevented participants from practicing HA independently. Pain avoidance, improving muscle strengths, weight loss, and stress reduction were the key motivators of ASE. Participants in the ASE group reported competing interests on time from family and life events, injuries and health issues, and depressed moods were the main exercise barriers. Practical and attitudinal strategies used for adherence were making an activity list to ability and preference, and self-monitoring.

Conclusion & Significance: Most participants attempted to remain active and incorporated some elements of the intervention into their regular exercise regimens; however, none adhered to the full program or recommended levels. Information on exercise barriers and strategies for long-term adherence can inform future OA exercise intervention strategies and studies.

C2. A Systematic Review and Meta-analysis of Physical Activity Intervention for Community-dwelling Older Adults

Janet L. C. LEE

Department of Social Work and Social Administration, The University of Hong Kong, Hong Kong

Correspondence: Janet L. C. LEE (janet_lee@hku.hk)

Abstract

Aims and objectives: This presentation aims to systematically review physical activity interventions developed for community-dwelling older adults in the literature in the recent years (2013-2018) and to determine the overall effectiveness these interventions.

Background: Physical activity (PA) interventions in the literature usually refer to behavioral change intervention that educate/counsel/advise participant to adhere to the PA health recommendations and one of the aims of the intervention is to help participants to maintain the PA behavior.

Methods: A systematic review of literature was conducted to review interventional studies for community-dwelling older adults. Literature from 2013 to 2018 is the focus. Relevant literatures were searched through internet on the CINAHL Plus, Medline, ProQuest, Psychinfo, PubMed and SportDiscus databases. Interventional studies were only included if:

1. the subjects were apparently healthy community-dwelling elders;
2. physical activity behavior was one of the outcome measures;
3. mean age of participants > 59 years old;
4. the study design was quasi-experimental design or randomized controlled design

Exclusion criteria:

1. intervention include a nutrition or diet component
2. focus on specific clinical condition (e.g. fall-prevention)

Statistical analyses were performed using Comprehensive Meta-Analysis Software (M. Borenstein, Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R.,, 2005).

Results and Discussion: Based on the criteria**,** 11 studies published between 2013 to 2018 were included in the review. The studies were conducted in Canada, USA, Netherlands, Germany and United Kingdoms. Over half of the studies were randomized controlled studies and the rest were quasi-experimental design studies. PA Intervention duration for community-dwelling elders ranged from 5 weeks to 12 months. Majority of the interventions last for 3 months. As the maintenance of PA behavior was always one of the objectives of PA intervention, most interventions have a long follow up period. Most PA interventions for community-dwelling older adults were multi-components PA intervention which include components like education sessions, exercise sessions, print materials in the form of handbook or newsletter, counselling sessions by phone or face-to-face and e-platform. Majority of the interventionalists have a background related to applied health sciences. They

were health fitness specialist, exercise Physiologist, psychologist with doctoral degrees and practice nurse. Other interventionalists included researcher with experience in holding PA programs, trained personnel/university students and e-Coach. All the PA interventions in the included studies were either based on behavioural change model or have applied behavioural change strategies. Ecological model, Social-cognitive model, wellness theory, transtheoretical model, I-change model, lifespan theories, selection optimization and compensation theory, social-emotional selectivity theory, self-determination theory and health action process approach were theories being used to guide PA intervention. Meta-analysis found that the overall ES was 0.14 (95% 0.09-0.19, p<.001)

C3. A Qualitative GIS Investigation in Exploring the Older Adults' Perceptions of Their Exercise Space in the Neighbourhood and the Planned Exercise Space Designed for Them

Janet L. C. LEE [1*], Yingqi GUO [1,4], Rainbow T. H. HO [1,2,3]

[1] *Department of Social Work and Social Administration, The University of Hong Kong, Hong Kong*
[2] *Centre on Behavioral Health, The University of Hong Kong, Hong Kong*
[3] *Sau Po Center on Aging, The University of Hong Kong, Hong Kong*
[4] *Centre for Suicide Research and Prevention, The University of Hong Kong, Hong Kong*

* Corresponding author: Janet L. C. LEE (janet_lee@hku.hk)

Abstract

Aims and objectives: Use Qualitative Geographic Information System (QGIS) to find out older adult's active locations, and the environmental, social and individual attributes of their choices of locations, and how they perceive the exercise space ("Elderly fitness corner") that the government designed and built for them.

Background: Research studies have been suggesting physical activity (PA) behaviour is a result of a myriad of interrelated factors from individual, social, organizational, environmental and policy factors. In recent years, qualitative geographical information system approach (QGIS) has increasingly been used in qualitative research that investigates environmental influence on individuals. QGIS allows informants to articulate their perceptions, voice and feelings of neighbourhood environment in a way that could be translated to GIS database.

Methods: Four 1:5000 topographic colour maps combined to be one big map (Size:150 cm x 120 cm) with 3D photo image on representative architectural buildings placed on map (Figure 3) were used along with interview to explore community-dwelling older adults' active locations, perception of the locations and their awareness and perceptions of government built "Elderly fitness corner".

Results and Discussion: A total of 15 community-dwelling older adults aged 62-88 years old

(mean = 73±7.9) participated in the study. Public Parks, open space at housing estate, neighbourhood elderly centre, shopping mall, elderly fitness corner at public park, pedestrian bridge and children's playground were locations that older adults performed PA in the current study. It is interesting to find out that older adults were also active at children's playground. Intelligent use of infrastructure to support PA emerged as a theme under individual attribute. Shelter, aesthetics, spacious, proximity, fresh air, safety and exercise facility were environmental attributes that influenced older adult's PA. Staff, presence of other older adults, exercise groups and friends emerged as themes under social attributes.

The current study demonstrates that the accessibility and availability of outdoor public exercise space with exercise equipment ("Elderly Fitness Corner") in the neighbourhood did not lead to high utilization rate of the facility for PA in this sample. Only one older adult regularly performed PA at the location. Support and rehabilitation emerged as themes under positive perception. Informants appreciated how the facilities at EFC provide support to them and assisted them to exercise when they suffered from certain physical conditions. Crowded, distant, weather, safety, monotonous of equipment/facilities, fear of injury, and inadequate promotion emerged as themes under negative perception.

Conclusion: This paper improves current understanding on what environmental, social and individual attributes affect PA behaviours among older adults. The findings from this research will inform urban planning and development of interventionist that enable and encourage older adults to interact better with their immediate built environment in their neighbourhood.

C4. Effects of Ving Tsun Martial Art Training on Standing Balance Performance, Leg Muscle Strength, Knee Joint Proprioception and Reaction Time in Community-dwelling Middle-aged and Older Adults

Shirley S. M. FONG [1,2*], Timothy T. T. YAM [1], Yvonne T. C. CHAK [3], Joyce C. Y. LEUNG[4,5], William W. N. TSANG [4]

[1] *School of Public Health, University of Hong Kong, Hong Kong*
[2] *School of Nursing and Healthcare, Hong Kong Nang Yan College of Higher Education, Hong Kong*
[3] *Hong Kong Christian Service, Hong Kong*
[4] *School of Nursing and Health Studies, Open University of Hong Kong, Hong Kong*
[5] *Department of Social Work and Social Administration, University of Hong Kong, Hong Kong*

* Corresponding author: Dr. Shirley S. M. FONG (smfong@hku.hk or smfong2004yahoo@gmail.com)

Abstract

Background and aim: Ving Tsun (VT), also known as Wing Chun, is a popular Chinese martial art among the middle-aged and older adults. It is characterized by rapid striking techniques and agile footwork and thus may strengthen the sensorimotor and body balance systems. To date, its beneficial effects on the sensorimotor aspect of postural control are still

not clear. This experimental study aimed to evaluate the effects of VT martial art training on standing balance performance, lower limb muscle strength, knee joint proprioception and simple reaction time in community-dwelling middle-aged and older adults.

Methods: It was a randomized, parallel group controlled trial. Thirty-three adults were recruited from the Un Chau Neighborhood Elderly Center of the Hong Kong Christian Service. They were randomly allocated to either a VT group (n = 17, mean age = 67.5 years) or a control group (n = 16, mean age = 72.1 years). The VT group received VT sticking-hand training (https://youtu.be/ssaYXNGm7hM) twice per week for 3 months. The control group received no training but continued their usual daily activities and medical care. Measurements were taken before and after the intervention period by blinded assessors. The primary outcome was static standing balance performance, which was quantified by the sway area in standing using a force platform. Secondary outcomes were lower-limb antigravity muscles' peak force as measured by a hand-held dynamometer; knee-joint repositioning error, which was measured by a knee-joint passive positioning and active repositioning test using a universal goniometer; and simple reaction time as measured by the ruler drop test. Changes in the primary and secondary outcomes following the intervention were quantified by subtracting the baseline scores from the posttest scores. Then, the differences in change scores between groups were analyzed with independent t test. Intention-to-treat principle was used to handle the missing data due to attrition. Alpha was set at 0.05.

Results: Both VT and control groups demonstrated similar improvements in the primary and secondary outcomes from baseline to posttest. No significant between-group differences in the change scores were noted ($p > 0.05$).

Conclusions: Short-term VT training had no obvious effects on the standing balance performance, leg muscle strength, knee joint proprioception and reaction time in community-dwelling middle-aged and older adults.

Funding: This study was partially supported by the Hong Kong College of Community Medicine (TY Chau Training and Research Scholarship 2017).

Sub-theme: Community-based active ageing programmes and their effectiveness

C5. Ageing Pattern and Functioning Abilities among Adults with Intellectual Disability in Residential Setting in Hong Kong: Exploring the Need of Early Elderly Services

Phil W. S. LEUNG [1*], Virginia H. C. LEUNG [1], Doris S. C. LEUNG [1], Oliver C. K. WONG [2], M. Y. LAW [1], Queenie M. W. TAM [1], Carmen S. O. TSANG [1]

[1] *Rehabilitation Service, Have of Hope Christian Service, Hong Kong*

[2] *Haven of Hope Nursing Home, Haven of Hope Christian Service, Hong Kong*

* Corresponding author: Mr Phil W. S. LEUNG (wsleung@hohcs.org.hk)

Abstract

Background: Aging is a global public health issue, but scientific evidence regarding ageing among people with intellectual disability (ID) is still insufficient both locally and internationally. The lack of knowledge can potentially hinder effective service planning and resource allocation for this group. The present study aimed to provide scientific evidence by investigating the swallowing- and mobility-related functioning abilities among adults with ID in a residential setting in Hong Kong.

Methods: This study was conducted in the four Day Activity Centre cum Hostels (DACHs) under Haven of Hope Christian Service, which served people with moderate to severe level ID. In these hostels, health and functioning data were collected routinely on a yearly basis in order to closely monitor the physical condition of our residents. The present study made use of the cross sectional data collected in the period of August to September 2018.

Results: Data of demographics and functioning level among 204 residents in the four DACHs were included for the current analysis. The sample consisted of 108 males and 96 females. The mean age of participants was 44.69 years old (age range: 21-75 years), and 45.6% of them aged above 45 years. The prevalence of various impaired functioning were as follow: 37 residents (18.1%) required wheelchairs; 5 (2.5%) were bed-bound; 6 (2.9%) used walking aid; 8 (3.9%) used thickener; and 19 (9.3%) took puree meals. In addition, 106 (52%) residents were identified to have fall risk as assessed by the Morse Fall Scale. Using a cutoff age of 45 years, Pearson chi-square tests showed that those who aged older than 45 years old were 2.62 times (p=0.01, 95% confidence interval (CI) 1.25-5.51) more likely to use wheelchair, 8.95 times (p=0.03, Fisher's Exact Test, 95% CI 1.08-74.16) more likely to use thickener, and 3.32 times (95% CI 1.86-5.92) more likely to report the presence of fall risk.

Conclusions: To achieve healthy ageing, the health needs among elderly must be identified and addressed in a timely manner in order to prevent, or delay, the degeneration of functioning. The present study identified a significantly higher likelihood of swallowing- and mobility-related functioning deterioration as our residents grew older. These results implied the urgent need of multidisciplinary professional supports among this population group in the residential setting. The current analysis made use of the age of 45 years old as the cut-off point, which further highlighted the needs of earlier elderly services among people with ID when compared with the 'normal' ageing population. Further implications on services and policies will be discussed.

C6. Services to Support Dying at Home

Bryan P. C. CHIU [1*], Ben Y. F. FONG [2]

[1] *School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong*

[2] *College of Professional and Continuing Education, The Hong Kong Polytechnic University, Hong Kong*

* Corresponding author: Mr Bryan P. C. CHIU (19038179s@student.speed-polyu.edu.hk)

Abstract

Most people work so hard with the aim to maintain a better quality of life after retirement, which is often and "naturally" considered as approaching the 'end' of a person's life. However, the true and real end of life, death, is usually not discussed among people in the community, not even among family members. The topic is neglected even by the elderly themselves. Hong Kong has the highest life expectancy in the world and the ageing problem is serious. Ironically, Hong Kong ranked 22nd in quality of death index in a 2015 study. Therefore, Hong Kong citizens are facing the situation of '*living longer but not necessarily better'*. People in Hong Kong usually think about end of life services as the funeral service only. Nonetheless, not much attention is being paid to other end of life services such as home care, dying at home service, counselling and support to family members, etc. According to a survey conducted by The Economist Intelligence Unit in 2015, Hong Kong scored below the global average among the 80 countries studied in the component of 'community engagement', which examined the level of discussion and awareness of the choices of end-of-life and palliative in the community. End of life services allow people to pass away with dignity and to suffer from less pain during the terminal stage. Little information on palliative care is available from government portals. Hence, more study should examine the feasibility of dying at home in Hong Kong, as an alternative to institutional hospice care and to raise public attention to the quality of end of life care, with reference to the current situation of dying at home services. Apart from the comfort, convenience and self-dignity to the dying person, dying at home is much less costly than death at hospitals or nursing home. However, there are several obstacles in developing and providing the dying at home services in Hong Kong, including poor understanding in the community, ambiguity in the law and inadequate public resources in the services supporting dying at home. The Government should initiate incentives and public support systems to enhance the involvement of the community in end of life issues. Some countries in the world have developed the end of life services with more comprehensive and intimate services, like home-based care and die-at-home services. The Hong Kong Government's consultation paper on "*End-of-life Care: Legislative Proposals on Advance Directives and Dying in Place*" released in September 2019 is major step forward to clear the legal obstacles in dying in place, including the home. The consultation document has drawn attention among the professionals and the public.

Parallel Session D: Application of Technology in Aged Health and Safety

D1. Innovative Virtual Reality Simulation as Practice Tools for Dementia

Wai-kwong POON [1*], B. Y. C. LAU [2]

[1] *Accident and Emergency Medicine Academy Unit, Faculty of Medicine, The Chinese University of Hong Kong, Hong Kong*

[2] *Department of Applied Science, Hong Kong Institute of Vocational Education (Kwai Chung), Hong Kong*

* Corresponding author: Dr Wai-kwong Poon (poonwaikwong@yahoo.com)

Abstract

In caring the dementia patients, it is vital to maintain their safety and best if get their environment remain same as before in order not to threatening their routines daily living. However, it is hard due to the external environment change; and hard to bring back the old traditional environment back for dementia patient to delay their deterioration. It would be a very attractive and valuable learning tool to student as well as the patient who does not have much details background with the old dates but now like working together hand in hand with patients.

Virtual reality (VR) is an interactive computer-generated experience taking place within a simulated environment, that incorporates mainly auditory and visual, but also other types of sensory feedback like haptic. This immersive environment can be similar to the real world or it can be fantastical, creating an experience that is not possible in ordinary physical reality. Augmented reality systems may also be considered a form of VR that layers virtual information over a live camera feed into a headset or through a smartphone or tablet device giving the user the ability to view three-dimensional images.

Healthcare, by its nature, is extremely information intensive. The challenge, however, is helping dementia or participants get the right information at the right time and place like the old days so effective care can be delivered and full understanding on delivered knowledge in scene. Two interactive scene was produced, one for wet market and another one was the road crossing to let them uptake the correct altitude on those environment plus calculation after purchase in that virtual market.

Result and Discussion: We have conducted a preliminary trial for six Institute of Vocation Education lecturers, we all were impressed and satisfied with the preliminary trial result. We would like to apply such on orientating the elderlies in coming future and further explore its effectiveness in related modules and compare their performances and their dementia deterioration. We are expecting that the use of latest virtual reality and simulation technology on teaching and allowance of personal self hand on control and hope it would increase their interest in learning related subjects and with good performance outcomes; and delay the elderlies on dementia deterioration and arose their interest to play with the games through interactive Kinect Technology

Keywords: Virtual Reality, Simulation, Interactive, Kinect Technology

Reference:

Hsieh, M. C., & Lee, J. J. (2018). Preliminary Study of VR and AR Applications in Medical and Healthcare Education. *Journal of Nursing and Health Studies, 3*(1), 1-5. doi:10.21767/2574-2825.100030

D2. Comparative Analysis of Policy in End-of-Life Issues in Hong Kong and Macau

Fowie S. F. NG [1*], H. C. MA [2]

[1] *Hong Kong College of Health Service Executives, Hong Kong*

[2] *Kiang Wu Hospital, Macau*

* Corresponding author: Dr. Fowie S. F. NG (fowieng@gmail.com)

Abstract

With the increasing number of aging populations, many countries are now looking into ways how to improve the standard of 'End-of-Life' (EoL) services in terms of both hospice and palliative care. Hong Kong and Macau are neighboring special administrative regions of China with similar challenges brought by the aging populations. In this presentation, a comparative study of the current provision, policy and future development of hospice and palliative care will be highlighted to illustrate the similarities as well as differences between the two localities. It also provides the factors affecting the development of hospice and palliative care in both Hong Kong and Macau. China has recently piloted an end-of-life program in several cities and municipal districts including Haidian district in Beijing, Putuo district in Shanghai and Changchun in Jilin since 2017 and hopes to soon expand an end-of-life program across the whole country. The opportunities of developing Hong Kong and Macau as a center of excellence in 'End of Life' care in the Greater Bay Area are envisaged in an attempt to supplement the gap in the provision of high quality and ethical End-of-Life care in the region.

D3. Medical Training with Virtual Reality (VR) for the Aged

Y. M. TANG [1*], Joseph Yui-yip LAU [2]

[1] *Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University, Hong Kong*

[2] *Division of Business and Hospitality Management (BHM), College of Professional and Continuing Education, The Hong Kong Polytechnic University, Hong Kong*

* Corresponding author: Dr. Y. M. TANG (mfymtang@polyu.edu.hk)

Abstract

The high risk for mortality and morbidity contributes the healthcare as a high hazard industry. One particular focus is the importance of patient safety produces high-quality healthcare service. Many of the adverse events in hospitals can be avoided with safe clinical practice and culture. Therefore, innovative and comprehensive medical training is crucial nowadays. To provide top quality patient care to the aged, medical professionals have to learn and develop both technical and non-technical skills. The tradition SODOTO skill is no longer suitable in the knowledgeable modern society and dynamic environment. With advancement of technology, virtual reality (VR) has been proven to shorten the learning curve of medical trainees, demonstrate professionalization and reduce human errors in front of the patients. VR training not only offers a realistic environment for learning, medical professionals can also practice repeatedly to increase their quality of their work. Besides, VR training can also be applied directly for the aged with stroke, mild cognitive impairment, etc. to perform rehabilitation and practices. In the VR training program, aged or patients can navigate and interact without distractions in a safe and calm environment, which is difficult to find in the real environment. Their performance can also be obtained for a series of assessment. The VR training program not only provides opportunities for the aged and patients to practice repeatedly, but also eliminates training time and costs compared with traditional training method. The VR training outcome is expected to provide an interesting and effective training to the elderly. On the other hand, we will also introduce the latest development of mixed reality (MR) and the future development of extended reality (xR). We will explore how the development of artificial intelligence (AI) technology can be integrated with VR in order to extend its application in the biomedical and clinical areas in the future.

D4. Deployment of Virtual Reality (VR) to Promote Green Burial

Joseph Yui-yip LAU [1*], Y. M. TANG [2], Adolf K. Y. NG [3,4], Ivy N. M. CHAN [1]

[1] *Division of Business and Hospitality Management (BHM), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong*

[2] *Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University, Hong Kong*

[3] *Department of Supply Chain Management, Asper School of Business, University of Manitoba, Canada*

[4] *St. John's College, University of Manitoba, Canada*

* Corresponding author: Mr Joseph Yui-yip LAU (yuiyip.lau@cpce-polyu.edu.hk)

Abstract

According to the population projections conducted by Census and Statistics Department, Hong Kong will be a more congested city to accommodate 8.22 million people in 2043. In particular, dramatic growth of aging population is a severe challenge because with one in

every three people in Hong Kong is expected to be older than 65 in 2066. The long-held Chinese traditions for burial of deceased as reverence and honour, coupled with the chronic land shortage have presented an excessive demand for cemetery space. In addition, niches are seldom be recycled and inadequate supply of new columbarium niche surge the family of the deceased to consider alternative way for keeping cremated ashes. To ease the demand, "green burial" has been launched and promoted by the HKSAR government through different print media and social media. Currently, scattering of cremains in gardens of remembrance or at sea are the two common ways to perform green burial. The public acceptance of green burial, however is still questionable issue as well as green burial is under-researched.

In doing so, this study is going to deploy the innovative technology, virtual reality (VR) to increase physical and psychological fidelity in highly resembled scenarios for the people. On one hand, VR gives immeasurable value to people when they are enabled to navigate different circumstances (physical fidelity) before considering the use of green burial. On the other hand, VR enables the people to engage in different mental processes (psychological fidelity) replicated from an array of cognitive reaction and sentiments with the choice of green burial. In order to optimize the configuration of the VR settings, we will conduct a face-to-face, semi-structured and in-depth interview with different practitioners including government bodies, logistics firms, policymakers, religious leaders, funeral service providers, health service professionals and general public (e.g., family of deceased). In the study, we explore: (1) To what extent the enhancement of physical fidelity of innovative technologies debunk public's misconception of green burial? (2) To what extent the enhancement of psychological fidelity of innovative technologies debunk public's misconception of green burial? (3) To what extent the simulation experience derived from innovation technologies change the public acceptance of green burial?

D5. Reflection on the Study of Brain Health and Dementia (大腦健康與認知障礙症照顧的個人反思)

黃承志 Leader S. C. WONG

School of Professional Education and Executive Development, The Hong Kong Polytechnic University

* 聯繫作者: 黃承志 (singchiwong2012@gmail.com)

摘要

以前 對認知障礙症只是知道患者會失去記憶能力及沒能力照顧自己的日常生活，直至修讀了這活齡文憑課程後，對這病症加深了認識。

錯過 了才懂得珍惜。母親在生時，她後期也是認知障礙症患者。但當時我對認知障礙症一知半解，並沒有在她病發初期好好地與她相處，直到後期她漸漸失去記憶能力而無法辨認親人時，我感覺母親已經變了另一個人，無論衣食住行都需要其他人全面的照顧。事情往往都是在過後才醒覺有跡可尋，還記起母親在她健康還好時，已經開始部署其日

後生活安排，包括轉移積蓄，物色護理服務，只是沒開口說明而已。假若時間可以回轉，我一定會珍惜這時機，好好地陪伴她一起走過這艱難日子。

知道 認知障礙症是沒法可治癒，但可以在前期多做些預防工作，例如認識甚麼是認知障礙症、知道與患者溝通的技巧、患者的情緒和行為特徵及處理、了解認知障礙症在社區的支援和服務。同時，知道認知障礙症患者的基本照顧技巧及照護者的壓力及需要，這可讓自己和家人對認知障礙症有一個基本概念，有助延遲這病症的惡化速度，從而作好心理和實際的準備；也可以為照顧者提供適切的支援，使患者及照顧者的壓力減至最低。

照顧 認知障礙症患者，是一項極艱辛且漫長的工作。照顧者與患者相處時常常出現各種大大小小的磨擦，需要付出極大的精力和智慧來應付。此外，患者經常會情緒不穩，動不動責罵別人，嚴重的更會發生襲擊行為。而在照顧過程中，照顧者經常因感到無助，容易感到沮喪、氣餒、失望甚至容易發怒，最感到苦惱的是患者的精神及身體狀況會日漸衰退，記憶能力也開始每況愈下，在照顧過程中所累積的壓力很容易達至頂點，稍有想不開便很容易作出傻事。

就減輕照顧者的情緒及工作壓力，以下分享我個人的意見：

裝備自己 多閱讀有關參考書籍、參加有關講座及課程、透過網上平台從多方面認識與患者的相處及照顧技巧，也可到一些有關中心當義工，從而體驗實際照顧技巧，為照顧工作做好準備。此外，要檢視家居環境，找出家居可能危及患者的潛在風險；了解社區可提供的任何支援，好讓有需要時能適時找到合適服務；而更最重要的是多關注自己的心理及身體狀況，確保自己有足夠能力隨時勝任照顧有認知障礙症的家人。

適當支持 照顧者為照顧病患者已付出了時間、精神、勞力、金錢，而能夠支持他們繼續工作的除了是愛心及忍耐力外，還需要得到家人及社會的認同，當照顧者感覺到要獨力承擔這沉重責任而得不到支援時，很容易覺得疲累、孤單、沮喪、嚴重的甚至會墮入自我放棄的負面情緒。而實質的支持如財政、早期檢測服務、暫托服務、到訪服務、傾訴熱線、日間活動中心等等，對照顧者會有很大的幫助。

總結 人生無常，但隨著醫學的進步，人類長壽是肯定的。預測將來 85 歲以上長者中每三個人便有一人為認知障礙症患者，因此，我們有需要保持腦部健康狀態，以預防及延遲發病的機會。未來人口不斷老化，而政府資源有限，照顧認知障礙症患者人手需求甚大，如果社會上多些人認識認知障礙症，對減輕此病症所帶來的問題會有很大的幫助。

Parallel Session E: Health in Greater Bay Area

E1. A Tale of Two Cities – A Comparative Study of the Policies and Social Welfare Services for the Elderly in Hong Kong and Macau

Ray Y. L. CHOY

Department of Innovative Social Work, City University of Macau, Macau

* Correspondence: Dr Ray Y. L. CHOY (raychoy@cityu.mo)

Abstract

Hong Kong and Macau are the Special Administrative Regions (SAR) of mainland China. The connectivity and exchanges between these two cities have been further strengthened with the completion of the Hong Kong-Zhuhai-Macau Bridge last year.

Both cities face the issue of ageing. In Hong Kong, there were 1,163,000 elderly people (aged 65 or above, 16% of the total population) in 2016 whereas in Macau, the elderly population in the same year was 69,000 (11% of the total population). According to the United Nations, if the elderly population in a state has reached 7%, it is considered as an ageing society; 14% as an aged society; and 20% as a hyper-aged society. Macau is already an ageing society and Hong Kong an aged society.

The governments of both cities have formulated policies, and introduced a number social welfare services for the senior citizens and their family members. Though the level of ageing in Macau is less serious than that in Hong Kong, Macau in 2016 has set up a 10-year action plan for the elderly. On the other side of the Pearl River Delta, Hong Kong in 1997 has already established the Elderly Commission and made “Care for the Elderly” as a strategic policy objective of the Hong Kong government. In 2014, the Elderly Services Programme Plan was launched.

Concerning social welfare services, both cities put emphasis on home and community care services. Due to the voluminous demand of residential services in Hong Kong, the waiting list is long. The needs of such services are also expressed in Macau as the existing residential homes can no longer accommodate the demand.

Abstracted from a larger scale of study commissioned by the Social Welfare Bureau of the Macau SAR Government, the presentation will compare the policies, mechanisms and social welfare services for the elderly in these two cities. The changes and challenges will also be discussed.

E2. Spatial Design and Application of Residential Care in the Smart Community: A Case Study of Guangzhou City (智慧社區居家養老平台空間設計與實現 — 以廣州市為例)

江瑜 Yu JIANG、梁靜嫻 Tiffany C. H. LEUNG

澳門城市大學創新社會工作系 (Department of Innovative Social Work, City University of Macau, Macau)

* 聯繫作者: 江瑜 (254700031@qq.com)

摘要

中國城鎮化及老齡化現狀下，各地方政府都在積極推進社區居家養老，針對目前社區居家養老推廣現狀。通過收集初步資料，探究養老福利政策現狀，瞭解老齡化及城鎮化現狀下社區居家養老的普及度，以及瞭解智慧化配置在家庭養老中的普及度。本研究採用半結構訪談方式。研究地點為廣州市新舊兩個社區，擬選擇新社區（有電梯）入住率達到 80%，2018 年前舊社區（無電梯）入住率達到 90%以上進行訪談。研究對象為選擇年齡 60 歲至 70 歲的初老型老年人、70 歲至 80 歲的老年人、80 歲以上的長壽老人進行。資料收集時間為 2020 年 1 月至 2 月。採用編碼和描述數據，分類、識別主題。選取 20 個老年人進行身體健康自評後進行訪談，從智能需求、社區環境及國家政策三個方面收集社區居家老人的需要。本研究建議可從空間設計角度整合技術產品、一體化管理、服務輸出形成智慧社區居家養老平台。

關鍵字：城鎮化；智慧社區居家養老；平台；空間；設計與實現

E3. The Influence of Attachment on Subjective Well-being of Elderly Couples -- the Mediating Effect of Emotion Regulation Strategies (長者夫妻依戀對主觀幸福感的影響 —— 情緒調節策略的中介作用)

李儀嘉 Yijia LI *、蔡遠寧 Ray Y. L. CHOY

澳門城市大學創新社會工作系 (Department of Innovative Social Work, City University of Macau, Macau)

* 聯繫作者: 李儀嘉 (469072149@qq.com)

摘要

情緒調節是在情緒發生過程中展開，在情緒發生的不同階段，產生不同的情緒調節策略。合理的使用情緒調節策略對個體保持長期穩定幸福感具有重要意義。研究發現(Bowlby, 1969)，在早期形成並隨個體終身發展的依戀風格會影響個體對情緒調節策略的使用。長者與青年對情緒調節調節策略的使用有著很大的不同，長者使用認知重評策略調節負性情緒的效果不如青年 (Opitz, Rauch, Terry & Urry, 2012)。相比於青年，長者更少使用表達抑制策略 (John & Gross, 2004）。

本研究從依戀角度出發，對長者的主觀幸福感進行分析，並嘗試將情緒調節策略的使用作為影響二者關係的中介變量納入考慮。本研究選取三個年齡層長者，其中 55-65 歲長者 100 名，66-75 歲長者 100 名，75 歲以上長者 100 名。使用老年人夫妻依戀問卷、情

緒調節量表 (ERS)、紐芬蘭紀念大學幸福感量表 (MUNSH)，旨在探討長者依戀、情緒調節策略及主觀幸福感之間的關係，以及情緒調節策略在長者依戀和主觀幸福感之間的作用機制。根據以往的研究，本研究提出以下假設：

假設 1：隨著年齡的提高，長者群體的依戀回避類型降低，55-65 歲年齡組長者的依戀回避類型多於 75 歲以上年齡組；

假設 2：75 歲以上年齡組長者比 55-65 歲及 66-75 歲年齡組長者更多的使用認知重評策略；

假設 3：依戀安全型和正性感情之間存在正相關，主觀幸福感更高；

假設 4：依戀焦慮型和負性感情之間存在負相關，主觀幸福感更低；

假設 5：依戀回避和負性感情之間存在負相關，主觀幸福感更低；

假設 6：依戀回避和認知重評之間存在顯著的負相關，和表達抑制之間存在顯著的正相關；

假設 7：依戀焦慮和認知重評之間存在顯著的負相關，和表達抑制之間存在顯著的正相關；

假設 8：依戀安全和認知重評之間存在顯著的正相關，和表達抑制之間存在顯著負相關；

假設 9:認知重評策略的使用在依戀安全型對主觀幸福感的影響中具有中介作用。在依戀回避和認知重評、表達抑制之間起部分中介作用。

E4. A System Study of the Quantity of Health Service for Disabled Elders and Social Support: Case Study of Chengdu (城市失能長者衛生服務數量與社會支持系統研究——以成都市為例)

王芷璿 Zhixuan WANG

澳門城市大學 (City University of Macau, Macau)

* 聯繫作者: 王芷璿 (wzx614352486@qq.com)

摘要

縱觀目前的醫療衛生服務市場，優質的資源越來愈多服務數量充裕且品質也愈發提高，長者也存在對醫療衛生服務資源利用不足的情況，例如不同層次醫療衛生服務資源分配不均的現象，與長者患病未就醫或無法及時就醫或濫用優質資源案例有關聯；現已有研究發現增加長者的社會支持，能夠更好更優選擇適合的醫療衛生服務資源。

本研究將服務機構按照中國大陸標準劃分「三級」醫療衛生機構層次，採用就診次數這種測度法對不同層次的利用度量。本研究在成都市選取不同程度的失能長者作為研究對

象，使用「ADL 日常生活活動量表」、「AD8 極早期失智症篩查量表」「SPMSQ 失智症篩查量表」對其失能程度分析，使用「SSRS 社會支持評定量表」、「PSSS 領悟社會支持量表」對其社會支持分析，從安德森模型的「傾向特徵」、「能力因素」、「致需因素」三個方面回歸得出支持因素；將社會支持因素與分層次醫療衛生服務利用數量二者做相關性分析，旨在為長者更優利用醫療衛生服務資源，指導不同層次資源分配與調節，有針對性地對服務稀缺層次數量增設與完善服務品質，增加該服務利用的便利性。本研究提出了以下一些列相關的假設：

1. 越高層次衛生服務利用數量和失能嚴重情況呈正相關，失能長者失能情況越嚴重，越高層次衛生服務利用數量越多；

2. 越高層次衛生服務利用數量和失能老人年齡呈正相關，失能長者年齡越大，越高層次衛生服務利用數量越多；

3. 越高層次衛生服務利用數量和失能老人保險數量支持呈負相關，失能長者保險數量越多，越高層次衛生服務利用數量越少；

4. 越高層次衛生服務利用數量和失能老人經濟收入呈正相關，失能長者的收入越高，越高層次衛生服務利用數量越多；

5. 衛生服務利用數量和社會支持正相關，長者的社會支持越充分的，衛生服務利用數量越少。

關鍵字：失能長者；衛生服務數量；社會支持；安德森模型

Parallel Session F: Service Learning and Ageing

F1. Achieving Elder's Ego Integrity by Instrumental Reminiscence Intervention (IRI)

Morris Wai Keung LEUNG

Social Worker, Ho Chui District Community Centre for Senior Citizens (Sponsored by Sik Sik Yuen), Hong Kong

Correspondence: Mr Morris Wai Keung LEUNG (sslwk02@siksikyuen.org.hk)

Abstract

This session is about the application of Instrumental Reminiscence Intervention (IRI) on facilitating ego integration of elders in the community.

According to the developmental psychologist Eric Erikson, ego integrity is the acceptance of one's only life cycle as something that had to be and as "a sense of coherence and wholeness. The virtue "wisdom" enables a person to look back on their life with a sense of closure and completeness, and also accept death without fear. IRI is one of the effective interventions in assisting the elders to achieve ego integrity.

To promote mental health, Sik Sik Yuen has been using IRI to alleviate depressive symptoms and improve life satisfaction among the singleton elders and couple elders family since 2011. In the IRI therapeutic group, each session is contextualized with a specific theme for discussion in the context of reminiscence, including "branching points", "major career", "loves and hates", "family", "stress experience" and "meaning in life". During group sharing within these themes, the worker assists the elders to explore their uniqueness and raise their self-esteem. The worker also facilitates participant's cognitive restructuring of self, to empower them with adequate ability to confront present life issues. Elders can thus identify suitable coping strategies from their own experience. This process will allow them to realize their capacity for self-determination to cope with current problems. The promoted sense of self-efficacy plays a major role in the formulation of ego integrity.

To strengthen the effect of IRI, our team provides "Life storybooks" service after finishing the group. Life story emphasizes the individual uniqueness of each participant. The individual interview in writing a life story is a flexible environment for participants to search for and recollect their past coping strategies. The themes of each interview session are always flexible to enable the participants to be guided to recognize their strengths according to their backgrounds. In addition, we applied life review approach in which individuals achieve an integrated view of their past life by resolving conflicts, accepting the difference between past and present, finding the meaning of life, and preparing for their death. All of these are essential components of ego integrity.

In conclusion, both the therapeutic group and life story focus on linking the past to now then future to facilitate ego integration – by recalling successful problem-solving strategies, elders are encouraged to use an active and problem-focused coping response to present issues and future challenges.

F2. Providing Elderly Care through Service-Learning: A Case Study and Proposal to Generate Subject Ideas in an Effective Manner

Patrick K. C. CHAN

Division of Social Sciences, Humanities and Design (SSHD), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong

Correspondence: Mr Patrick K. C. CHAN (patrick.chan@cpce-polyu.edu.hk)

Abstract

In the past decade, there has been an emerging interest among tertiary institutions in Hong Kong to engage students in Service-Learning, a pedagogical approach in linking community service and academic learning. With the context of teaching and learning changing from the classroom to where the service beneficiaries are located, new issues not found in the classroom are derived and need to be tackled. Teachers on one hand are asked to design more subjects to engage students to learn by serving out of the classroom, on the other when preparing subject proposals, they are challenged to comply with more rigorous standards and requirements comparing to normal "classroom subjects". This paper is a case study on a credit-bearing Service-Learning subject in a tertiary institution, designed to help students to learn about Human-Centered Design, and to help elderly to regain their self-esteem and bring them psychological and emotional satisfaction through helping them to recapture their lifetime stories, especially on their contributions in their families and communities throughout their lives. It begins by explaining the design rationale and objectives of the subject, its intended learning outcomes, curriculum and assignments. Then it explains its crossdisciplinary approach in implementation, and evaluates on the subject's impact on both the students as learners and the elderly as beneficiaries. The case study moves on to reflect on the relationship between the impact of the subject and its detail planning as well as carefully-choreographed implementation spanning for a semester. To promote engaging more students in elderly care through Service-Learning, and to help teachers to meet the rigorous requirements when preparing Service-Learning subject proposals, the paper will conclude by proposing a toolkit for teachers to design Service-Learning subjects in a more effective manner. The toolkit consists of 2 worksheets: one for analysing stakeholders' concerns and available resources that teachers could utilise, the other for brainstorming subject ideas from scratch and gradually develop and refine them into a mature and comprehensive subject concept.

Keywords: Service-Learning, Elderly Care, Subject Design, Human-Centered Design, Design Thinking

F3. Community Ageing with Health and Dignity through a Service Learning Initiative

Ben Y. F. FONG [1*], Hilary H. L. YEE [2], Tommy K. C. NG [2], Billie S. M. CHOW [3]

[1] *Division of Science, Engineering and Health Studies (SEHS), College of Professional and*

Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong
[2] Centre for Ageing and Healthcare Management Research (CAMHR), School of Professional Education & Executive Development (SPEED), The Hong Kong Polytechnic University, Hong Kong
[3] Division of Business and Hospitality Management (BHM), College of Professional and Continuing Education (CPCE), The Hong Kong Polytechnic University, Hong Kong
* Corresponding author: Dr Ben Y. F. FONG (ben.fong@cpce-polyu.edu.hk)

Abstract

A new compulsory service-learning subject in the Practices of Health Promotion was introduced in 2019 with the aims to develop students' ability to apply principles and concepts of health behaviour to motivate individuals to adopt a healthy lifestyle and instil in students a strong sense of empathy, social responsibility and professionalism. After an e-Learning module on the basic concept and practice of service learning and three intensive lectures on the subject, students undertook ten weeks of compulsory site services at four selected elderly centres under the guidance of site supervisors to make direct contact with elderlies and their carers or families. Students were required to submit two reflective journals at the middle and end of the site services. From the analysis of the first reflective journals, skills learned, challenges and the elders' personality and characteristics have been mentioned mostly by the students. This is expected as service learning is a new approach in learning to the student. They have to learn some skills and to face new challenges in accomplishing the assigned tasks in site services. Moreover, the recipients' personality and characteristics such as their bodily and psychosocial behaviours would have impacts to the close encounters. Communication, teamwork and design of site activities are the most cited skills learned. Students also have to face the challenge of communicating with the recipients, who are essentially strangers, and due to their lack of experience in dealing with elderly people. The elder's personality has dictated on how the students would encourage recipients' willingness to engage in conversations and activities during the site service participation. The limited space in the recipients' home is unfavourable to carrying out activities. Furthermore, in some occasions, miscommunication with the centre has caused the students to change the content of activities. However, students have overcome most of the challenges and they have learned the better ways to communicate with elders such as showing appreciation, using proper tone and to be patient listeners. Students have also learned to consider the elders' ability in planning service activities. The site service component of this service learning subject has fulfilled the intended learning objectives to discuss the roles and ethical decisions by the government and health care professionals in health promotion, and reflect on their roles and responsibilities as responsible citizens, to communicate effectively with client group and their families, and to demonstrate empathy for people in need and a strong sense of social responsibility. Students have learned from serving the elderly on how to promote health with dignity to the ageing population.

F4. Treasure in Elderly Home – A Service Learning Experience at Ho Wong

Neighborhood Centre for Senior Citizens

Roderick C. H. FUNG

School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong

Correspondence: Mr Roderick C. H. FUNG (19033067S@student.speed-polyu.edu.hk)

Abstract

The increasing of aging population becomes an imminent issue. The health problem about the elderly turns to be a critical topic. The hospitals, elderly homes and rehabilitation centers are the common facilities in meeting the needs of the elderly. However, health professionals may overlook the elderly needs as they face an immense workload in their daily work. In this study, the prevalent needs about the elderly are examined and some health promotion are provided for their condition. To investigate the needs of elderly, a service-learning programme was conducted in an elderly home lasting for about two months, once a week, and each session is about one hour. In the elderly home, there were about twelve participants and the students were divided into groups with two classmates and two elderly each. Each the service-learning session was divided into three parts. First, some information on health would be discussed by the team. Second, students would discuss with the elderly and examine their health needs. Third, there was a short conference to explore the conditions of each group. Some typical health issues of the elderly were found, mainly concerning mental conditions and habits. Insomnia was the most common mental issue among the elderly. It could be caused by many factors such as the unhealthy diet, past working style and health condition of family members. Under an idle life, the elderly was inclined to worry and think about these factors, and their emotions would change from positive to negative. When the negative emotion was always surrounding their life, the elderly might develop some serious behaviours in emotional expression such as suicide. The suicide rate of over 60 age group was high and was about three times of teenager. The habits of the elderly were another issue, including eating, physical and living habits. Some elderly would not be aware of their habits because they would desire to enjoy life at their age. These inconspicuous factors affect elderly health in an unobvious way. To resolve the issue, an open conversation was conducted regarding the condition and information was introduced to increase their awareness. This study reflects that the health needs of elderly are always related to the mental conditions and habits.

F5. Active Ageing 開心 Share: to Solicit Solutions to Ageing from a Multidisciplinary Perspective

Ada L. H. NG, Louis K. L. TONG, Cecily K. K. PANG, CK C. K. NG

Institute of Active Ageing, The Hong Kong Polytechnic University, Hong Kong

Correspondence: Mr. Jeffrey T. O. CHAN (tsz-on-jeffrey.chan@polyu.edu.hk)

Abstract

The Institute of Active Ageing (IAA), The Hong Kong Polytechnic University, is committed to research excellence and innovation in the critical areas of ageing, interdisciplinary education related to gerontology, and evidence-based practices for the promotion of active ageing. IAA adopts a unique and comprehensive model in the development of active ageing by encompassing knowledge from all fundamental dimensions of everyday life of an older adult. Four members of IAA will share their unique experience towards the importance of active ageing, and our goal is to solicit solutions to ageing from a multidisciplinary perspective: use of information and communication technologies (ICT), intergenerational experience, employment and contributions to society. Ms. Ada Ng is an ICT tutor to facilitate older adults to understand and use digital technology, also helping older adults appreciate how digital technology can enhance the quality of life. Mr. Louis Tong is active in intergenerational activities with youngers, sharing experience and assisting the next generation with the hope of making a difference in a future society. Ms. Cecily Pang hopes to rejoin the workforce. She believes professions are not limited by age, join the re-training program and start the second career in life as interviewers. Mr. CK Ng is a proactive volunteer before retired from an engineer, and he will share what he learned from volunteer service and the importance of older adults being volunteers to contribute to society. In line with this year's CPCE conference theme "Ageing with Health and Dignity: Implications for Public Policy, Service Delivery, Workforce, Technology and Financing," four members will share their own experience after retirement in each of the above aspects. They are not only a valuable asset of the community but also an essential source of untapped human capital. Everyone should have the right to age with independence, dignity and purpose. Their experiences will highlight the importance of a win-win for both older adults and society as we flourish retirees and transform their skills and knowledge from their previous contributions to the current community.

F5.1. Sharing of Use of Information and Communication Technologies (ICT)

Ms. Ada L. H. NG
Member, Institute of Active Ageing, The Hong Kong Polytechnic University

摘要

在資訊科技職場三十年,一下子退下真的不慣。機緣巧合下報讀了香港教育大學辦的「樂為耆師」長者導師專業證書課程,畢業後參與義務工作及社區中心的智能手機班作義教及助教,並參與香港理工大學活齡學院的「友導共學」成為資訊科技導師,主要教授透過使用手機、平板電腦日常生活上的應用。這次有幸被邀請在這平台與大家分享,作為資訊科技活齡導師,我的所見、所聞、所學及所教,實在長者學習資訊科技可以不與時代脫節,做個智醒活齡樂人,多參與,多分享及善用科技提升生活質素,與親朋保持聯繫,分享生活點滴,使身心健康些!

F5.2. Sharing of Intergenerational Experience

Mr. Louis K. L. TONG
Member, Institute of Active Ageing, The Hong Kong Polytechnic University

摘要

起初的退休生活中，每天只管四處跑，尋找新事物。但日子久了，總覺有點似在混日子。心想除此之外，我仍能找些甚麼別的事嗎？坊間入伍、登陸的活動多的事，但又想動靜皆能，接觸不同的層面，並能作點貢獻，慢慢找到了跨代共融、跨代義工的工種。曾接觸的對象年幼至小學一年級，大的有中學、大學及在職的青年。年紀小的在功課及英語上作互動的指導，在較成熟的年齡層面上，找到不同的活動的機遇去互相認識、分享及鼓勵。帶出同理心及欣賞的心態，作出啟發、認同和進步的新歷程。

F5.3. Sharing of Employment

Ms. Cecily K. K. PANG
Member, Institute of Active Ageing, The Hong Kong Polytechnic University

摘要

人生在坦途時，每事都覺得是理所當然。在 2013 年我踏進人生的轉捩點，我的丈夫在七月中某天離開家門，便沒有回家了。他在街上突然暈倒，在深切治療部搶救了四天，最終離世了。人生如何重新起步呢？初時，每天好像如常生活，但自己感覺很空洞。女兒先後給我兩個錦囊，其一替我報讀了蓮花燈製作班，及提議我報讀長者導師訓練班。在製作蓮花燈時，使我靜下心來處理花瓣及加强了專注力。而長者導師訓練班使我有機會圓了進入大學的夢想，並享受到大學生的學習環境，與同學們一起學習的樂趣。這兩件事使我走進長者中心，將我所學的蓮花燈教與長者。其後我又參加了由活齡學院所舉辦的「意見調查訪問員課程」。畢業後並獲得香港大學兼職問卷調查員的工作使我生活充實很多，結識了很多新朋友，擴闊社交圈子，使自己與社會保持了緊密的聯繫。

F5.4. Sharing of Contributions to Society

Mr. CK C. K. NG
Member, Institute of Active Ageing, The Hong Kong Polytechnic University

摘要

退休後，太太鼓勵我加入香港理工大學活齡學院。在理大與太太一起參加了一些義工活動 —「代代有愛 · 全英傳語 – 跨代共融英語計劃」、「生命學長同行計劃」、「認識活齡 提升專業機遇」、「接待家庭計劃」等等。我熱愛擔任義務工作，其中我想分享我的特殊義工經歷，我曾以義工身份參與海洋公園獸醫團隊的「野猴避孕及絕育計劃」。由

於九龍水塘及石梨貝水塘一帶野猴大量繁殖，對遊客帶來危險，還危害生態環境。獸醫團隊替猴子施行避孕手術，義工們須協助搬運物資，設立臨時操作間，安排猴子進入獸籠，並記錄猴子的詳細情況。「活到老，學到老」，擔任義工除了幫助社會還令我大開眼界，十分開心能為保育香港生態環境出一分力，協助獸醫團隊順利完成計劃。退而不休，投入義工服務，我遇到不同的人和事，擴闊了社交圈子，學習到新事物，也是老年人分享生活經驗的好機會，身心更健康，活得更充實精彩。老年人不再是社會負擔，而是貢獻社會的生力軍。

VII. POSTER PRESENTATIONS

P1. Home Hygiene and Prevention of Infections

Sukhpreet KAUR

Correspondence: Miss Sukhpreet KAUR (izsukhy@gmail.com)

Abstract

Health is wealth - a famous proverb that almost everyone has heard of but may not have fully understood its essence. Health comes from maintaining cleanliness and hygiene which starts from home and expands to workplaces and public areas. By practicing hygiene in home and everyday life settings, it would impact significantly in reducing the global burden of infectious diseases, a global crisis that kill over 17 million people a year. Mainly caused by microorganisms, infections can easily spread across with direct and indirect contact. Some of the common infectious diseases include chickenpox, common cold, malaria, meningitis, pneumonia, severe acute respiratory syndrome, tuberculosis and pertussis. These diseases tend to have specific symptoms such as fever, diarrhoea, fatigue and muscle aches, and are treated differently depending on the severity and one's immune system. While most can be treated by taking antibiotics, it is advised to consult a doctor should the symptoms get worsening or last longer than a few days. It is equally important to understand that heavy reliance on antibiotics may reduce the ability to treat infections. Good hygiene means fewer infections and hence reduced demand of antibiotics. This will limit the circulation of antibiotics in the community and the need for development of new generation and potent antibiotics. In institutional settings, such as schools and child-cares setting, information relating hand hygiene is routine. However, the home environment, as one of the potential sources of transmission of infectious diseases, draws least attention in public health programmes or community health talks in general. This, of course, needs to be re-evaluated and the promotion of home hygiene should be encouraged as a positive correlation has been found between home hygiene practices and risk of disease transmission in homes. In homes, the first line of defence against infectious diseases is cleaning and disinfecting plus keeping hands healthy. The chances of spreading infectious diseases can be lessened by maintaining good hand hygiene, surface cleaning and regular disinfection. Hygiene practices including hand, food, respiratory, toilet and laundry hygiene are vital as they focus on protecting against harmful organisms which our immune systems are equipped to deal with. But, the implementation for an effective policy to monitor home hygiene is rather complex due to its reliability. The low income communities have seen integrating hygiene promotion with improvement in water quality and availability, and sanitation though culture plays a vital role in determining the interaction of many factors and behavioural practices. In a nutshell, proper home hygiene and cleaning practices lead to reduced risk of spreading infectious diseases. They should form the key issues in the practice of health promotion in the community and institutions.

Poster P1 by Sukhpreet KAUR:

THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學
COLLEGE OF PROFESSIONAL AND CONTINUING EDUCATION 專業及持續教育學院

School of Professional Education and Executive Development 專業進修學院 SPEED 20th

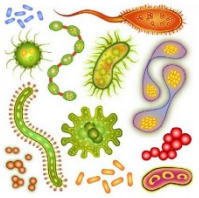
HONG KONG COMMUNITY COLLEGE 香港專上學院

Centre for Ageing and Healthcare Management Research 老齡化和醫療管理研究中心



Home Hygiene and Prevention of Infections

By Sukhpreet KAUR



MATTER

- **Infectious diseases** – a global crisis that kill over 17 million people a year
  - Spread across with direct and indirect contact
- **Common infectious diseases**: chickenpox, common cold, malaria, meningitis, pneumonia, sever acute respiratory syndrome, tuberculosis and pertussis
- **Symptoms**: fever, diarrhea, fatigue and muscle aches

WHAT CAN BE DONE?

- Understand that health comes from maintaining cleanliness and hygiene
  - It starts from home and expands to workplaces and public areas
  - Hand, food, respiratory, toilet and laundry hygiene – to fight against harmful organisms
- To re-evaluate the distribution of information relating to hand hygiene in home environment and to encourage promotion of home hygiene
  - A positive correlation between home hygiene practices and risk of disease transmission in homes
  - In home, first line of defense against infectious disease – maintaining hand hygiene, cleaning and regular disinfection

AN EFFECTIVE POLICY

- An effective policy to monitor home hygiene is rather complex due to its reliability
- The low income communities have seen integrating hygiene promotion with improvement in water quality and availability, and sanitation
  - Culture plays a vital role in determining the interaction of many factors and behavioral practices

References:

Aiello, A. E., Larson, E. L., & Sedlak, R. (2008). Personal health Bringing good hygiene home. *American Journal of Infection Control*, *36*(10). doi: 10.1016/j.ajic.2008.09.009

Larson, E., & Gomez Duarte, C. (2001). Home hygiene practices and infectious disease symptoms among household members. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/11285106

Why is home hygiene important? – Hygiene-related disease in the home and community. (n.d.). Retrieved from https://www.ifh-homehygiene.org/factsheet/why-home-hygiene-important-—-hygiene-related-disease-home-and-community.



P2. Quality Improvement of Operating Theatres in Hong Kong Public Hospitals

Carina Y. H. LAM

School of Professional Education & Executive Development, The Hong Kong Polytechnic University, Hong Kong

Correspondence: Miss Carina Y. H. LAM (18017832S@student.speed-polyu.edu.hk)

Abstract

The quality of the operating theatres affects patient's life directly. The "WHO Surgical Safety Checklist" was started in 2008 and it has become an essential part of the surgical process. Although Hospital Authority of Hong Kong started to promote "Surgical Safety Policy" in 2009, medical incidents in surgery still continued to happen in recent years. Medical incidents occurring in the operating theatres has accounted for 50% of all medical incidents in public hospitals of Hong Kong since 2008. The surgical team is a substantial cause of medical incidents, possibly because of human mistakes, knowledge and personal factors of the surgeons, and communication mistakes. Other factors which affect the quality of the surgery process in operating theatres are multifarious, like the environment, equipment and system parts. Therefore, this review had analysed the current situation in public hospitals of Hong Kong, described challenges faced by operation theatres in public hospitals, and gave recommendations on service quality improvement. The ideal quality of the operating theatres is principally due to the professional surgical team and the proper operating environment. Therefore, the government and the Hospital Authority should improve the quality of the operating theatres, especially in terms of professional training and retention of staff. After all, surgery is a task of teamwork.

Poster P2 by Carina Y. H. LAM:



P3. Improvement of Health Care Voucher Scheme in Hong Kong

Cheryl C. W. HO

School of Professional Education & Executive Development, The Hong Kong Polytechnic University, Hong Kong

Correspondence: Miss Cheryl C. W. HO (18037204s@student.speed-polyu.edu.hk)

Abstract

According to the Department of Health, the Health Care Voucher scheme is a kind of subsidy provided by the Hong Kong government to the elderly to increase their freedom of selecting private primary healthcare services. It targets at allowing the elderly to choose the most suitable private medical services through financial incentives. The scheme encourages the elderly to establish a closer relationship with private doctors who are familiar with their health situation and promotes the concept of family doctors. After years of development, elderly have an amount of $2,000 Health Care Voucher every year. The upper limit of accumulated voucher would be $8,000 in which the limit for using voucher on optometric services would be $2,000 every two years. According to a survey done by the Society for Community Organization (SOCO) and the Elderly Rights League (Hong Kong), the percentage of elderly participating in the Health Care Voucher scheme has increased from 28% in 2009 to 78% in 2017. Although the trend of the elderly visiting doctors has increased, the Health Care Voucher scheme in Hong Kong still has room for improvement. From the survey, the average claimed amount for dental care services was $6,222 in 2015-2016. 27.1% of the elderly was found giving up the services as almost half of them said they could not afford the fee. In addition, the Research Office of the Legislative Council found that the elderly visited western doctors 3.45 times on average in 2015 and the average claimed amount of optometric services and western medicine were $1,769 and $326 respectively in 2016. This means that having either dental care services or optometric services are likely to exceed the subsidy budget if the elderly need to visit doctors in the year. Hence, the voucher cannot support the elderly to enjoy dental care services and optometric services in the same year but they have to wait for around three years. These reflected that the amount of Health Care Voucher was insufficient. In June 2019, the government increased the coverage of the scheme so that elderly holding a Hong Kong identity card can use the voucher in The Hong Kong University-Shenzhen Hospital as well. Nevertheless, Hong Kong elderly who lived in places other than Shenzhen cannot enjoy this scheme. To improve the Health Care Voucher Scheme and solve the abovementioned problems, the government should increase the amount of voucher and expand the geographical coverage. Ultimately, the elderly would enjoy greater flexibility in choosing medical services they really need and the Health Care Voucher can fulfil its aims.

Poster P3 by Cheryl C. W. HO:



P4. Quality Management of Inpatient Medication Administration in Hong Kong Public Hospitals

Catherine K. Y. KWONG

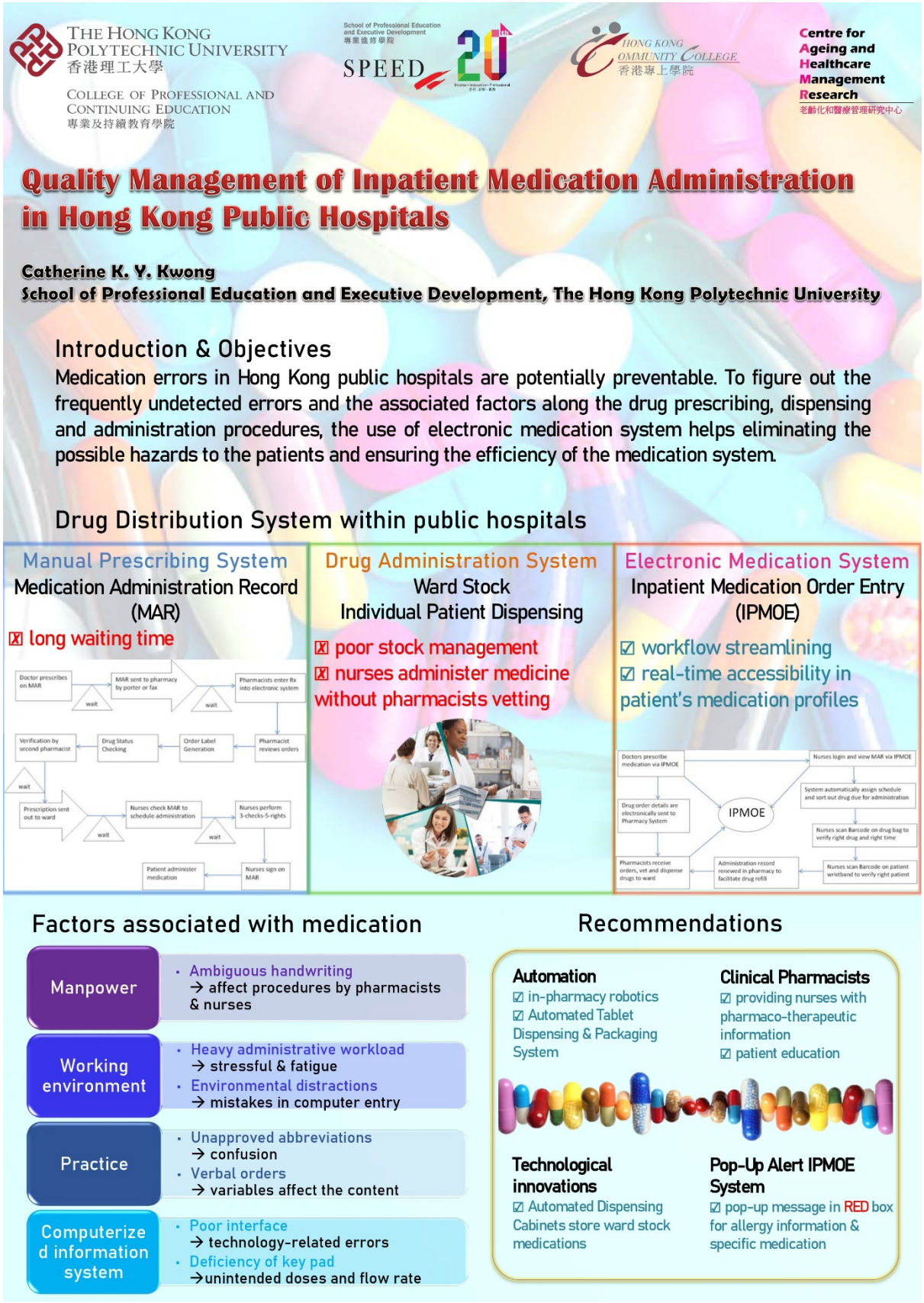
School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong

Correspondence: Miss Catherine K.Y. KWONG (18055781s@student.speed-polyu.edu.hk)

Abstract

Medicine maladministration to patients could lead to serious adverse drug events, prolonged hospitalisation, extra medical treatment, morbidity and death. In public hospitals of Hong Kong, the pattern of medication error consists of (i) prescribing error usually made by physicians, (ii) dispensing error resulted from pharmacists and dispensers, (iii) drug administration error caused by nurses and patient-care workers and (iv) technology-related error which is associated with technology used during the drug administration process. Medication Administration Record (MAR) is the inpatient medication prescribing system within Hospital Authority (HA) public hospitals before the development of the electronic system. Ward stock is one of the inpatient drug administration systems which stores common prescribed drug items in wards to reduce the turnaround time between prescribing and administering medications. Since 2010, an electronic medication system, Inpatient Medication Order Entry (IPMOE) has been used instead of hand-writing order form. The module provides real-time accessibility in patients' medication profiles, and helps eliminating the update of paper prescription by different professions and health units. However, several factors are associated with medication errors, including manpower, working environment, practice and computerized information system. The ambiguous handwriting orders in the MAR prescribed by physicians definitely affect the transcription by pharmacists and the administration procedures in ward by nurses. Heavy administrative workload reduces the time for nurses in checking the quantity and quality of medications. Administering medicines in ward stock before pharmacists vetting increase the chance of making errors. The unapproved abbreviations cause confusion to professionals working in different units. Inappropriate working procedures lead to mixing up the barcoded patient identification labels in drug administration. Poor interface issues between users and system, and the computer over-reliance have also contributed to technology-related errors. In order to reduce the occurrence of medication incidents, implementation of Automated Pharmacy Distribution Systems is the key in moving towards a closed loop medication management system. Introducing clinical pharmacy services could aid nurses on the pharmaco-therapeutic information during medication administration in wards, and also patients' education. Modifying technologies in barcode assisted medication administration technology and smart infusion pumps could help intercepting drug administration errors to patients. The enhancement in IPMOE with a pop-up message in a red box is recommended to alert staff about the allergy information of patient and the particular medication treatment during prescribing, dispensing and administration. The elimination of the potential risks arising from the prescribing, dispensing and drug administration procedures brings the achievement of medication safety in Hong Kong public hospitals.

Poster P4 by Catherine K. Y. KWONG:



P5. Project Management in Promoting Green Burial in Hong Kong

Cynthia S. Y. LAU

School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong

Correspondence: Miss Cynthia S. Y. LAU (18051131S@student.speed-polyu.edu.hk)

Abstract

The situation of ageing population will become more serious in the coming thirty years. The birth rate is decreasing during the past five years but the death rate is increasing continuously. It requires having more columbaria and niches supply in Hong Kong but it takes time and need more places to build up new columbarium and niches. As a result, the government starts promoting green burial, which is an environmental and sustainable method to handle the ashes of the deceased. Relatives can choose either scattering the ashes at the Garden of Remembrance or at the sea. It can produce less toxic gases because all preparations do not use any chemicals but biodegradable resources are employed instead. It can also use fewer materials and save the nature. To promote this service, the government has done different types of promotion. The government has designed many leaflets, banners, posters and videos for the public. It also works with non-government organisations and institutions to hold seminars and exhibitations. Recently, they have developed a memorial website for the deceased in the Internet and mobile app version. They also introduce a tour for exploring the procedure of scattering ashes at the sea. Although the government has done many promotions on green burial, it still has many insufficiencies and the effect is not reflected to the public. There are issues related to new technology development, competition between green burial and memorial diamond, failure delivery, generalisation of promotion messages, education for the next generation, and Chinese traditional culture and beliefs. These factors affect relatives and patients in choosing the types of burial. In order to increase the generalisation and promotion on green burial, the government should put more efforts on it. It can extend the promotion at the internet on the random playing basis, provide subsidy to relatives in having scattering ashes or producing memorial diamond, provide education starting from secondary students, provide areas for scattering ashes, as well as conducting annual review and monitoring on the policies. By having these actions, green burial should become more generalised and be better developed. Hence, the sustainability will enhance continuously in the future.

Poster P5 by Cynthia S. Y. LAU:

THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學
COLLEGE OF PROFESSIONAL AND CONTINUING EDUCATION 專業及持續教育學院

School of Professional Education and Executive Development 專業進修學院
SPEED 20th

HONG KONG COMMUNITY COLLEGE 香港專上學院

Centre for Ageing and Healthcare Management Research 老齡化和醫療管理研究中心

Project Management in Promoting Green Burial in Hong Kong

Lau Shin Ying Cynthia
School of Professional Education and Executive Development,
The Hong Kong Polytechnic University

What is Green Burial?

- Not using chemical in the preparation and progress of cremation
- Use biodegradable cloth to cover the body
- Not putting vault on the top
- Promoted in Hong Kong over 10 years





How many types of Green Burial in Hong Kong?

- Scattering ashes at the Garden of Remembrance
- Scattering ashes at the sea





Problems in promotion

- New technology development and competition between green burial and memorial diamond
- Not generalized in the source of message
- Not enough education for the next generation
- Chinese traditional culture and belief

Recommendations

- Provide subsidy category on memorial products
- Play promotion video at the internet on random basis (e.g., online advertisement)
- Provide education starting from secondary school
- Provide more areas for scattering ashes
- Annual evaluation on the policy

P6. Analysis of Operations of Pharmacy in Hong Kong

Alex H. Y. SUEN

School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong

Correspondence: Mr Alex H. Y. SUEN (18023992S@student.speed-polyu.edu.hk)

Abstract

Medication errors and near-miss are the common form of medical incident in the pharmacy, especially in the crowded public health sector where the personnel need to deal with heavy workload. Medical incident can be an indicator for service quality, therefore reducing medication error at the pharmacy could reduce the occurrence of medical incident. Problems in human resource and equipment could lead to occurrence of medications error. Staff deployment and rostering, and integrity and version of equipmentare factors affecting the chance of having an error. Deployment of operation management strategy and tactics in the pharmacy settings could help to reduce errors. Process mapping commonly used in pharmacy to demonstrate the operations workflow, giving staff guidelines and at the same time can be used as analysis for possible problem and design of measures for improvement. For process and quality management, Lean System model, focusing in automation and shorten process can be used to increase productivity with automated dispensing system or robotic dispensing system, to trim down process steps and time by adapting computerized system to carry out redundant or repetitive process, which Hospital Authority are already using such as Clinical Management System(CMS), Pharmacy Management System(PMS) etc. Queuing of patient can be done with mobile applicationby issuing them an electronic signal card, an e-ticket to replace the process of submitting the prescriptions to the counter and receiving a printed label ticket. Information technology like 2D barcode and Radio Frequency Identification (RFID) helps in rapid and accurate medications identification, and enhancing service quality and patient safety. Innovative supply chain management and vendor managed inventory, in which the vendor direct manages ward medication inventory, reduce the workload of pharmacy by outsourcing. Possible management strategy in process and quality, and supply chain management can be performed in public hospital pharmacy in Hong Kong, resulting in improving the service quality and patient safety by increasing level of automations, eliminating waste, shortening process time, reallocating staff and resource to out patient service with the new ward inventory management strategy.

Poster P6 by Alex H. Y. SUEN:

THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學
COLLEGE OF PROFESSIONAL AND CONTINUING EDUCATION 專業及持續教育學院
School of Professional Education and Executive Development 專業進修學院
SPEED
HONG KONG COMMUNITY COLLEGE 香港專上學院
Centre for Ageing and Healthcare Management Research 老齡化和醫療管理研究中心

Analysis of Operations of Pharmacy in Hong Kong

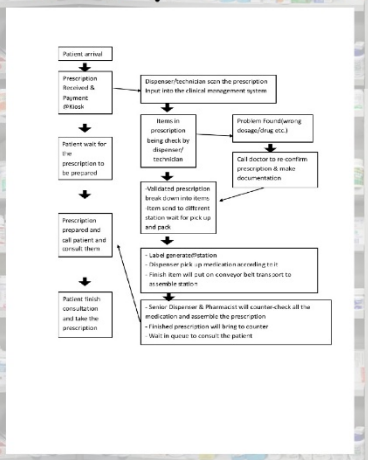
SUEN Hao Yeung Alex
School of Professional Education and Executive Development
The Hong Kong Polytechnic University

Reasons of Medication errors in Pharmacy

1. Human Resources
   - Heavy workload
   - Long working hour/Work over-time
   - Human factor
   - Unfamiliar with medications
   - Fail to perform "five rights" checking
2. Equipment (Hardware & Software)
   - Malfunctions
   - Wear down



Process Mapping of Pharmacy Workflow



Recommendations



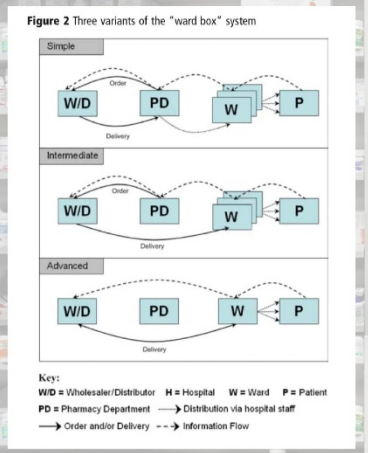
Process & Quality Management

1. Lean System
   - Eliminate waste -> seamless stream of production
   - Automation
   - Shorten process time
2. Information technology
   - 2D barcode
   - RFID

Supply Chain Management

1. Vendor managed inventory (VMI)
   - e.g ward box in Australia
   - Decrease pharmacy workload
   - Reallocate staff -> focus on outpatient

"Ward box" examples



Reference:
Bhakoo, V., Singh, P., & Sohal, A. (2012). Collaborative management of inventory in Australian hospital supply chains: practices and issues, *Supply Chain Management: An International Journal*, *17*(2), 217-230.

P7. Retirement Preparation in Hong Kong

May S. M. CHAN *, Maggie H. Y. KWONG

School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong

* Corresponding author: Miss May S. M. CHAN (19046063S@student.speed-polyu.edu.hk)

Abstract

The demograph of Hong Kong is changing, more ever than before as the population trend is decreasing and it has one of the lowest birth rates in the world. According to the world population chart, the majority of groups of people is between 36 and 56 years old. Hence, it has resulted in less new blood joining the labour force, but the labour force is still in balance due to the continuing increase in the labour force participation rates of older men and women. Moreover, the World Population Prospect has predicted that 30% of the population would be taken by the elderly in the future. More and more elderly will take up a significant demand for retirement and become a burden for society. In terms of the socioeconomic status of the elderly, it will focus on educational attainment and poverty rates. In the population aged 65 and over, a more significant percentage of women living alone live in poverty compared to the percentage of married-couple families. Living alone and being single, which means late marriage, and having fewer children to be the primary breadwinners of the family. Consequently, older people have a higher chance of having the lack of direct care and support from family. Retirement life will become cruel. This paper has reviewed the types of retirement of the genders, among different social classes and socioeconomic status of older adults. It also looks through the problems in cost, workforce and facilities to review how these factors influence the retirement programme. Within different backgrounds of each person and different retirement planning programme, it has revealed that the lack of resources for elderlies leads to the limited welfare and other healthcare support.

Poster P7 by May S. M. CHAN, Maggie H. Y. KWONG:

THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學
COLLEGE OF PROFESSIONAL AND CONTINUING EDUCATION 專業及持續教育學院

School of Professional Education and Executive Development 專業進修學院
SPEED 20th

HONG KONG COMMUNITY COLLEGE 香港專上學院

Centre for Ageing and Healthcare Management Research 老齡化和醫療管理研究中心

Retirement Preparation in Hong Kong

CHAN Siu Mei & KWONG Hoi Yee
School of Professional Education and Executive Development, The Hong Kong Polytechnic University

INTRODUCTION

World Population Prospect
- 30% of the Population = Elderly

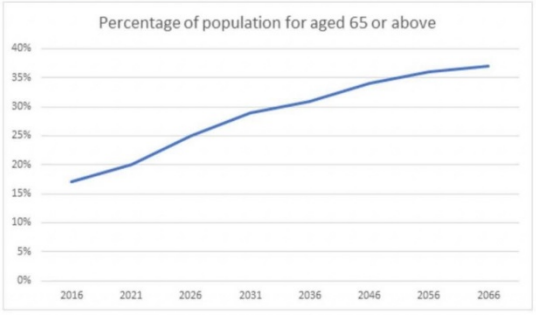
Ageing population in Hong Kong
- ↓ Working population
- Lowest Birth Rates
- Caught the government off guard
- Significant Demand for Retirement
- Burden for Society



PROBLEMS

1. Cost in Daily life
2. Employment Problem
3. Facilities and Social Support For the Elderly
4. Discrimination and Inequality

PERCENTAGE OF ELDERLY AGED 65 OR ABOVE IN HONG KONG



Demographic Statistics Section, Census and Statistics Dept., Hong Kong. Hong Kong population projections, 2016-2066, Hong Kong population projections, 2016-2066 (2017). Hong Kong





RECOMMENDATIONS

1. Government policy--> to solve MPF offsetting mechanism
2. Early Retirement Preparation Programme
3. Social Support

P8. Time Banking for Elderly/Volunteers in Hong Kong: Current Practice and Challenges

Tommy K. C. NG [1*], Noel T. S. YIM [1], Ben Y. F. FONG [2]

[1] *School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong*

[2] *College of Professional and Continuing Education, The Hong Kong Polytechnic University, Hong Kong*

* Corresponding author: Mr Tommy K. C. NG (tommy.ng@speed-polyu.edu.hk)

Abstract

To reduce the burden of the ageing population, time banking can be one of the possible approaches in the community to maximise social capital. Time banking aims to exchange one's time to serve others and the time of service can be saved as credit so as to swap for services when necessary. It can create a virtuous cycle for providing and receiving services. Several positive outcomes to service providers and recipients of time banking are identified in this review paper. Nevertheless, there is a lack of practical adoption of time banking in Hong Kong. To analyse the challenges of the adoption of time banking in Hong Kong, the current practices of time banking in Hong Kong, the United States, European countries and Asian countries will be evaluated. To promote time banking in Hong Kong, governmental, technical and educational support are recommended.

Poster P8 by Tommy K. C. NG, Noel T. S. YIM, Ben Y. F. FONG:



P9. Changes on Ageing Causes: from Service Learning Perspectives

Jason Y. L. WONG

School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong

Correspondence: Mr Jason Y. L. WONG (19043583S@student.speed-polyu.edu.hk)

Abstract

Ageing is a serious issue worldwide and is not unique in Hong Kong. It creates a sequence of effects, particularly health problems. Serval kinds of persistent disease will develop related to ageing, for instance hypertension, heart problem, diabetes and some neuro-related problems. Medical expenses will also expand due to these chronic problems. Therefore, the best way to prevent the occurrence and the severity of chronic diseases and to induce the elderly's awareness of their health is education. Type 2 Diabetes Mellitus (DM) is the most common chronic illness which affects mainly the elderly aged over 60 years old. Ordinarily, 20% of the elderly has Type 2 DM and approximately 18% to 33% of them were undiagnosed. On the other hand, the elderly will have fractures easily caused by falls. According to the Centers for Disease Control and Prevention, over 1 out of 4 of the elderly falls. Moreover, over 95% of the fractures are caused by falls. Furthermore, the elderly are not active in doing physical exercises. According to the Elderly Health Service of the Department of Health, elderly should do at least 150 minutes of moderate aerobic exercise weekly to maintain a healthy body. Therefore, to minimise the consequence of ageing, we should take some actions for the elderly. Firstly, we can educate them the methods to manage DM. Also, we can provide some suggestions for fall prevention. Finally, we can encourage them to do physical exercises regularly by teaching them a few kinds of elder-favour activity.

Poster P9 by Jason Y. L. WONG:

THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學
COLLEGE OF PROFESSIONAL AND CONTINUING EDUCATION 專業及持續教育學院

School of Professional Education and Executive Development 專業進修學院 SPEED 20th

HONG KONG COMMUNITY COLLEGE 香港專上學院

Centre for Ageing and Healthcare Management Research 老齡化和醫療管理研究中心

Changes on Ageing Causes: From Service Learning Perspectives

Jason Y. L. WONG
School of Professional Education and Executive Development, The Hong Kong Polytechnic University

Ageing causes

1. health problems
   - hypertension, heart problem, diabetes and some neuro-related problem
2. increase in health expenses

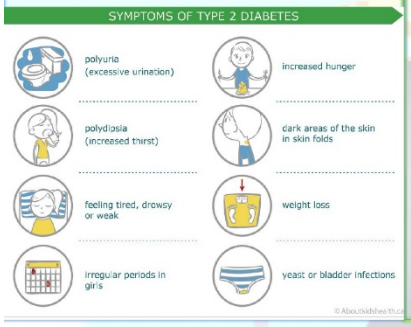
Service learning

- Visited elderly with 7 consecutive weeks
- Induced the health awareness
- Educated and promoted health to the elderly

Three common phenomena found through service learning

Type 2 Diabetes Mellitus

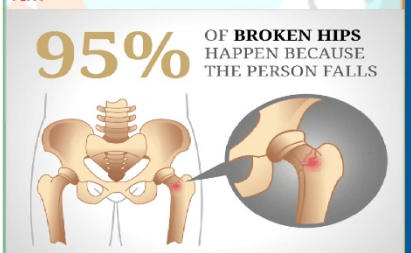
-Insulin resistance
-Hyperglycemia
-Affected 20% of the elderly



Fall

-Over 1 out of 4 of the elderly falls

-Over 95% of fractures caused by fall



Lack of Physical Exercise

-At least 150 minutes of moderate aerobic exercise weekly is needed



Suggestions for the elderly

Management and Prevention of Diabetes

1. Change diet preference
2. Regular exercise
3. To avoid smoking



Physical Exercises

1. "Eight Pieces of Brocade"
2. Tai Chi
3. Muscle strengthening exercise
4. Stretching



Fall Prevention

1. To use assistive devices (e.g. anti-slip bathmat)
2. To install safety handrails at home, particularly in bathroom and kitchen
3. Regular exercises and muscle training

P10. Palliative Care in Selected Economies in Asia: Taiwan, Singapore and Hong Kong

Hilary H. L. YEE [1*], Ben Y. F. FONG [2]

[1] *School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hong Kong*

[2] *College of Professional and Continuing Education, The Hong Kong Polytechnic University, Hong Kong*

Correspondence: Ms Hilary H. L. YEE (hilary.yee@speed-polyu.edu.hk)

Abstract

People are living in longer lives nowadays. With medical advancement, it has helped to prolong lives and a lot of diseases are cured. However, patients with life-limiting and terminal illnesses still suffer and palliative care is an approach to relieve pain and other distressing symptoms, and give psychological and spiritual support to patients and their families. Patients who have received palliative care have a significant decrease in readmission rate and better quality of life. In Asia, 'Four Asian Tigers' are the developed economies of Hong Kong, Singapore, Taiwan and South Korea. They ranked differently in the 2015 Quality of Death (QOD) Index as they have different development in end-of-life care. In the present paper, Taiwan, Singapore and Hong Kong, which ranked at number 6, 12 and 22 respectively in the QOD Index, are selected for comparison of their resources on palliative services, Advance Directives (AD) policy, and public awareness on palliative care. Taiwan has outperformed both Singapore and Hong Kong due to the government's sufficient support in resources from government, diversified education opportunities to professionals and continuous efforts on improving legislations to protect patients' autonomy. Singapore is following closely behind Taiwan's progress in expanding palliative care services. Hong Kong is relatively lagging behind to formulate comprehensive policies and legislations to increase public awareness and protect patients' right on medical decisions. However with the launched public consultation regarding AD legislation and expansion of end-of-life care, Hong Kong targets at reaching Singapore and Taiwan soon, and achieving a higher position in the QOD Index in the future. In parallel, rapid technology advancement facilitates the integration of palliative care and technology such as smart phone recording app and tracking bracelet. While keeping psychological and spiritual support as core components in palliative care, emerging technology for care and treatment can increase efficiency of care by doing real time assessment and preparing for more supportive services.

Poster P10 by Hilary H. L. YEE, Ben Y. F. FONG:

THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學
COLLEGE OF PROFESSIONAL AND CONTINUING EDUCATION 專業及持續教育學院
School of Professional Education and Executive Development 專業進修學院 SPEED
HONG KONG COMMUNITY COLLEGE 香港專上學院
Centre for Ageing and Healthcare Management Research 老齡化和醫療管理研究中心

PALLIATIVE CARE IN SELECTED ECONOMIES IN ASIA: TAIWAN, SINGAPORE AND HONG KONG

Hilary H. L. YEE
School of Professional Education and Executive Development, The Hong Kong Polytechnic University

What is palliative care ?

It is an approach that improves the quality of life of patients (adult and children) with terminal illnesses and their families by relieving pain and other distressing symptoms, giving psychological and spiritual support. Patients who have received palliative care have significant decrease in readmission rate and have better quality of life.



	Taiwan	Singapore	Hong Kong
2015 Quality of Death (QOD) Index	◆ 6	◆ 12	◆ 22
Capacity of hospice beds	◆ By 2017 → 62 hospitals with in-patient's wards; 443 hospitals that offer hospice homecare, collective community hospice care and collective hospice care	◆ In 2011 → 137 hospice beds In 2017 → 230 beds By 2020 → expected to have 360 beds	◆ By 2017 → 360 beds in total, with 30 part-public and part-private beds from Jockey Club Home for Hospice
Palliative care professionals	◆ 567 palliative medicine specialists training capacity; 33 clinical Buddhist chaplains	◆ 51 registered palliative care specialists; 784 registered nurses trained in palliative care	◆ 22 registered specialists in palliative medicine; 300 nurses engaged in palliative care
Government's subsidy and supports	◆ National Health Insurance; longer admission → cheaper fee	◆ Subsidy provided based on means test; MediSave	◆ Voluntary Health Insurance Scheme; subsidy provided in private hospice
Advance directives policy	◆ Natural Death Act Patient's Right to Autonomy Act	◆ Advance Medical Directives Act	◆ Public consultation on legislation to AD and dying in place from September to December 2019
Public promotion	◆ Standardised life and death education curriculum in mainstream schools from Primary 5	◆ Art-based engagement programmes and activities: art works, music, photography, performance activities etc.	◆ Regular talks, seminars and symposiums



Breaking culture taboo

Traditional Chinese religious and culture→ death and dying discussion are not preferred
Need more education, promotion and professional development

Integrating technology into care

Tracking bracelet, mobile apps→ track patient's medical condition, record heart rate, blood oxygen, body temperature→ prediction of early deterioration

References
The Economist Intelligence Unit. (2015). *The 2015 quality of death index: ranking palliative care across the world.* Lien Foundation.
World Health Organization. (2019). WHO Definition of Palliative Care. Retrieved from https://www.who.int/cancer/palliative/definition/en/

ACKNOWLEDGEMENT

The Conference Chair and Director of Centre for Ageing and Healthcare Management (CAHMR) of PolyU SPEED wish to thank members of the Organising Committee for making all of the arrangements for the CPCE Health Conference 2020. This Conference is partially supported by a funding of HKD2.45 million under the Institutional Development Scheme (IDS) of the Competitive Research Funding Schemes for the Local Self-Financing Degree Sector in 2018/19 of the Research Grants Council (RGC) to establish the CAHMR [Ref. no.: UGC/IDS24/18]. SPEED under PolyU CPCE is the grantee of this research funding. Thanks and gratitude should also be conveyed to the Conference Advisors, Co-organisors, colleagues and students of HKCC, SPEED, CPCE and The University, Sponsors, Supporting Organisations and Moderators of all the presentations for the great support to this important annual event.

We are honoured to have the blessings of the Dean of CPCE, Professor Peter P. Yuen, to deliver the welcoming remarks. Moreover, the presence of academics from Australia, Canada, Chinese Mainland, Hong Kong, Japan, Macau, South Korea, Thailand, as well as the United States of America as speakers at the Conference has granted the programme a great learning opportunity for our students, our academic colleagues, as well as participating academics and professionals in health care and other disciplines.

The enthusiastic submissions by authors and presenters of papers in the Parallel Sessions and Poster Presentations reflect the importance of the themes under discussion at the Conference. We would like to express our sincere thanks for their contributions to the knowledge and ideas on the topics of concern in ageing and health with dignity.

We wish to thank all participants, from both local and overseas, for their time and support dedicated to the Conference and hope to meet them again in future seminars and events. Best wishes for the New Year and good health!

© The College of Professional and Continuing Education (CPCE) of The Hong Kong Polytechnic University and Centre for Ageing and Healthcare Management (CAMHR), School of Professional Education and Executive Development (SPEED), The Hong Kong Polytechnic University.