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

CPCE HEALTH CONFERENCE 2016

AGING, HEALTH AND LONG TERM CARE - Integrity, Innovation and Sustainability

老齡化、醫療服務及長期護理：操守、創新及持續發展



Programme Book

Date:
11 January 2016 (Monday)

Time:
1:30pm – 5:30pm

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

Hong Kong Association of Family Medicine and Primary Health Care Nurses 香港家庭醫學及基層健康護士協會

Hong Kong Community Care Society 香港社區護理學會

HKPAA 香港公共行政學會 Hong Kong Public Administration Association

Institute of Active Ageing 活齡學院

Sik Sik Yuen 嗇色園

Wu Yee Sun College 伍宜孫書院

Yee Hong Centre For Geriatric Care 頤康中心

盈健醫療 Human Health

Onward 安和關懷 Community Healthcare

Pacific

Pfizer 輝瑞

Pro-Cardio 心運

Education Post 教育網

SCMP South China Morning Post

Introduction

The College of Professional and Continuing Education (CPCE) of The Hong Kong Polytechnic University, 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 over 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. The Academic Discipline of Health and Life Sciences of CPCE was commissioned last summer to organise this Conference with the aim to share research and scholarly work pertinent to aging, health and long term care. It also takes the opportunity to promote interdisciplinary education and research on the topics related to the theme of this Conference -- "AGING, HEALTH AND LONG TERM CARE: Integrity, Innovation and Sustainability".

The Keynote Speech "*The future cost of health and care"* is to be delivered by Sir James Mirrlees, Nobel Laureate in Economic Sciences (1996) and Master of Morningside College of the Chinese University of Hong Kong.

Speakers for the Plenary Sessions include Professor Kenneth Lee, CPCE Academic Advisor (Health and Life Sciences) and Professor and Head of Pharmacy, Monash University, Malaysia, to speak on "*The use of health economic data in maximizing health outcomes - a global perspective*", and Professor Peter P. Yuen, Dean of CPCE, The Hong Kong Polytechnic University to present on "*Reforming Hospital Care Financing in Hong Kong: Everyone a Private Patient"*.

There are six parallel sessions containing a wide range of important topics pertinent to integrity, innovation and sustainability of health care systems 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 Hong Kong, Macau, Mainland China, Taiwan, Thailand as well as Canada and U.K. These contributors from the region and other parts of the world share their perspectives about challenges and opportunities in aging, health and long term care.

The Conference Workshop is to be led by Professor K.T. Tsang from the University of Toronto to share the experience of delivering professional long-term care services by an institution for the Chinese seniors in Canada.

Table of Contents

Introduction 1
Organising Committee 5
Officiating Guests 7
Keynote Speakers 8
Moderators of Parallel Sessions 11
Programme 12
Keynote Address 16
The Future Cost of Health and Care 16
Plenary Session I 17
The Use of Health Economic Data in Maximizing Health Outcomes - a Global Perspective 17
Plenary Session II 18
Reforming Hospital Care Financing in Hong Kong: Everyone a Private Patient 18
Parallel Sessions 19
A. The International Medical Tourism and Wellness 19
Social Impact of Individual Visit Scheme (IVS) of Chinese Mainland Tourists on Hong Kong: Evidence from Hong Kong Residents 19
Holistic Development of Wellness Tourism in Buddhamonthon 20
Emerging Trends of Asian Medical Tourism 21
Medical Tourism Development in Hong Kong: an Assessment of the Barriers 22
Image of Thailand as a Medical Tourism Destination 23
Service Design for Medical Tourism in a Smart City 24
B. Innovative Primary Care 25
Paradigm-Shift for Primary Health Care Delivery: Concept of Community Health Practitioners 25
Community Based Rehabilitation: Opportunities and Limitations 26
Digitalization of Medication Therapy Management: Integrating Smartphone Apps into Continuum of Care 27
Mobility Performance and Foot Problems in Older People 28
A Review of Three Dimensional Knitted Spacer Fabrics for Medicine and Healthcare and Recent Developments 29
C. Performance Measurement and Management for Health Care Organizations 30
Organization Change through an Intimacy & Sexuality Project, with SSLD Underpinning 30
Performance Measurement for Governance of Social Enterprise: Enhancing Accountability and Innovation in Elderly Homes 31
Determinants of Inpatient Expenditure for Chronic Kidney Failure Patients in Guangzhou, China 32
Should the Activity-Based Costing (ABC) Method be Applied to the Hong Kong Healthcare Service Industry? 33
Students' Perceptions on Integrity of Healthcare Professionals in Hong Kong 34
D. Long Term Care and Rehabilitation 35
Preferred Place of Care and Death among Elderly Patients Receiving Palliative Care 35
Mechanical Evaluation of Woven Glass-Fiber Reinforced Composites for Rigid Scoliosis Brace 36
Effects of Slippers on Sit-to-Stand Transition of Older Women 37
Chemical Issues in Pharmaceutical Supply Chain: A Case of Tamiflu 38

In-school Screening for Adolescent Idiopathic Scoliosis: Results of Adam's Forward Bending Test and Shoulder Obliquity in Adolescent Girls in Hong Kong 39
Behavioral Training of Paraspinal Muscles in Sitting Position with Biofeedback for Adolescent Patients with Mild Idiopathic Scoliosis 40
E. Health Care Reform and Sustainability 41
Finding New Pathways to Ensure the Financial Sustainability of China's Medical Insurance System for Urban Employees 41
Easing the Manpower Shortage Challenge through Exploring Alternative Employee Resourcing Models 42
Development of Private Hospitals in Hong Kong: an Institutional Explanation 43
Public Private Partnership in Health Care in Hong Kong 44
Aging Society Encourages Public and Private Movement in Thailand 45
Towards Exposure-Based Health Impact Indicators: Application to Hong Kong 46
F. Innovation and Higher Education in Health Care 47
An Investigation of Fruits and Vegetables Consumption among University Students in Hong Kong 47
Complementary and Alternative Medicine (CAM) Regulation and Education for Health Care Professionals: A Comparison between the UK and Hong Kong 48
Using M-Learning to Exploit Visual and Kinaesthetic Modes in Health Education 49
Effect of Postural Strap on the Relief of Work-related Muscle Pain: A Pilot Study 50
A Review of Innovative Types of Braces for Adolescent Idiopathic Scoliosis (AIS) 51
The Influence of Health and Beauty Perception on Medical Tourism Intentions: A Learning Lesson from Korea for Hong Kong 52
Poster Presentations 53
List of Poster Presentations 53
Application of Health Belief Model in Cardiovascular Diseases 55
Application of Theory of Reasoned Action in Prediction of Smoking Cessation 56
Review of Colorectal Cancer in Hong Kong Using the Study in South Korea 57
Promoting Electronic Health Record (eHR) Sharing System in Hong Kong – What Can We Learn from Taiwan 58
Prevention of Diabetes: a Strategic Framework for Hong Kong 59
Health Information Searching Behavior among College Students in Hong Kong: An Exploratory Study 60
Preventive Strategies for Intimate Partner Violence – a Hong Kong Perspective 61
The Effect of Clavicle Support on Myoelectric Activity of Axioscapular Muscles in Young Women with Chronic Neck and Shoulder Pain during Computer Typing 62
Study of Medical Nurses' Knowledge about Palliative Care and the Effect of Educational Intervention 63
Aging in Place – the Future Trend of Elderly Policy in Hong Kong 64
Sexual Health Promotion on Contraception among Hong Kong Teenagers 65
Universal Health Care in Hong Kong: Lessons from Taiwan and Singapore 66
An Analysis of the Use of Vitamin Supplements among College Students in Hong Kong 67
Stay away from "Four-hypers" – Let's Start with Exercise and Healthy Diet! 68
Unhealthy Nutrition and Lifestyle Habits: How They Affect Our Health in Short Term and Long Term 69
Health Care Service and Population Aging in Hong Kong 70

Primary Health Education in the Community Provided by Students of Health Studies: Stress Urinary Incontinence Care among Female in Hong Kong 71
Regular Physical Exercise and Risks of Heart Disease 72
Conference Workshop 73
The Continuum of Care – How Yee Hong serves the changing needs of the Chinese seniors in Canada 73
Awards for Outstanding Student Papers in Health Studies 74
Acknowledgement 75
Appendix: Posters 76

Conference Chair

Professor Peter P. Yuen
Dean, College of Professional and Continuing Education, The Hong Kong Polytechnic University

Organiser

The Academic Discipline of Health and Life Sciences, College of Professional and Continuing Education, The Hong Kong Polytechnic University

Advisors

Professor Kenneth Lee
Professor of Pharmacy and Head, School of Pharmacy, Monash University Malaysia

Professor Rance Lee
Master of Wu Yee Sun College, The Chinese University of Hong Kong

Professor Albert Lee
Professor (Clinical) of School of Public Health and Primary Care and Fellow of Wu Yee Sun College, The Chinese University of Hong Kong

Professor Peter Walters
Associate Dean, College of Professional and Continuing Education, The Hong Kong Polytechnic University

Dr Simon Leung
Associate Dean, College of Professional and Continuing Education and Director, Hong Kong Community College, The Hong Kong Polytechnic University

Dr Jack Lo
Director, School of Professional and Executive Development, The Hong Kong Polytechnic University

Organising Committee

Chair	Dr Ben Fong, Senior Lecturer, SPEED
Scientific Subcommitte Chair	Dr Artie Ng, Deputy Director, SPEED
Co-ordinator, Parallel Sessions	Dr Alex Chan, Principal Lecturer, SPEED
Publication	Dr Ken K.L. Peng, Visiting Scholar, SPEED
Media and Publicity	Mr Ray Yuen, Marketing and Communications Manager, SPEED
Administrative Supports	Ms Isis Cheung, Programme Manager, HKCC
Members	Dr Gabriel Chan, Lecturer, HKCC
	Ms Jenny Heung, Senior Lecturer, HKCC
	Dr Vincent Law, Lecturer, SPEED
	Dr Dana Lo, Senior Medical Officer, University Health Service, The Hong Kong Polytechnic University
	Dr Carrie Wong, Lecturer, HKCC
	Ms Shirley Wong, Lecturer, HKCC
	Dr Eric Woo, Senior Lecturer, HKCC
Secretary	Dr Simon Cheung, Lecturer, SPEED

Associate Organisations

- Auxiliary Medical Service
- College of Pharmacy Practice
- The Hong Kong Association of Family Medicine and Primary Health Care Nurses
- Hong Kong College of Health Service Executives
- Hong Kong Community Care Society
- Hong Kong Public Administration Association
- Institute of Active Ageing
- Sik Sik Yuen
- Wu Yee Sun College, The Chinese University of Hong Kong
- Yee Hong Centre for Geriatric Care

Supporting Organisations

- Health Concepts Limited
- Human Health
- Onward Community Healthcare Service Limited
- Pfizer Corporation Hong Kong Limited
- PRO-CARDIO Heart Disease & Stroke Prevention Centre

Media Partners

- South China Morning Post
- Education Post

Officiating Guests



Professor Sophia Chan, JP

Under Secretary for Food and Health, The Hong Kong SAR Government



Professor Timothy W. Tong, PhD

President of The Hong Kong Polytechnic University

Keynote Speakers



Professor Sir James A. Mirrlees

Professor Sir James A. Mirrlees was born in 1936 in Scotland. He obtained his first and second degrees in Mathematics from the University of Edinburgh and the University of Cambridge respectively, and his PhD in Economics from Cambridge in 1963. He was Edgeworth Professor of Economics and Fellow of Nuffield College in Oxford from 1968 to 1995 and after 1995, Professor of Political Economy at Cambridge. Since 2002 he has been Distinguished Professor-at-Large at The Chinese University of Hong Kong and in 2009 he became Master of Morningside College, established in The Chinese University of Hong Kong.

Sir James has also held Visiting Professorships at MIT, UC Berkeley and Yale. He was President of the Royal Economic Society from 1989 to 1992, and is a fellow of the British Academy, the Royal Society of Edinburgh and the Econometric Society, and a Foreign Honorary Member of the U.S. National Academy of Sciences and the American Economic Association.

He was awarded a Nobel Prize in 1996 for his fundamental contributions to the economic theory of incentives under asymmetric information. He was knighted for contributions to economic science in 1997.

In the work that earned the Nobel Prize, he studied the problem of optimal income taxation in a situation where individuals take the tax schedule into account when choosing his work effort and government does not have information on the productivity of individual citizens. In such a case, a high tax rate will discourage people from working hard while a low tax rate will result in government budget deficits. The theory shows how to derive an optimal tax schedule, balancing efficiency and equity, and taking into account the limited information about individuals that is available to the government.

Another significant contribution deals with the problem of moral hazard. For example, full insurance coverage encourages individuals not to take precautions against risk and as a result lowers the insurance company profits. The theory shows how to construct contracts that provide correct incentives for behaviour that cannot be observed. This work also allows companies to design contract terms that give their employees incentives to act, as much as possible, in accordance with the companies' objective of profit maximization. Sir James's work laid the foundation for the modern analysis of complex information and incentive problems, which can be applied to many other similar situations.



Professor Kenneth KC Lee, BSc(Pharmacy) MPhil PhD

Kenneth Lee is Professor of Pharmacy and Head of School of Pharmacy, Monash University Malaysia. Before he moved to Malaysia, he was Professor and Associate Director (External Affairs) of the Chinese University of Hong Kong (CUHK) School of Pharmacy where he was one of the founding members and had subsequently worked for 18 years. He was appointed as a Justice of the Peace by the government of Hong Kong in 2003 for his services to the community.

Professor Lee received his pharmacy undergraduate training from the University of Washington in Seattle. His subsequent higher qualifications were from the CUHK and the University of Oxford, UK. He is widely recognised as one of the pioneers in pharmacoeconomics and outcomes research in Asia focusing on comparative effectiveness research, health technology assessment and healthcare policy development. He has published extensively in peer-reviewed international journals and has been author/editor of several textbook chapters. He has been the Editor-in-chief of the *Journal of Medical Economics* since 2006 and is serving on the editorial board of a number of international journals including *Value in Health* and *Expert Review of Pharmacoeconomics*. He served as Adjunct Professor of School of Pharmacy, the CUHK, and Honorary Professor of School of Public Health, the University of Hong Kong from 2010-13. From 2008-11, he was also appointed as visiting Professor of University of London School of Pharmacy. He was appointed as advisor in the development of the first pharmacoeconomic evaluation guideline by the Malaysia Ministry of Health in 2011 and also recently appointed as a member of the Technical Advisory Committee for Health Technologies Economic Evaluation by the Ministry.

Professor Lee has served in a number of positions in the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) based in New Jersey USA. He was the major driving force and later a founding member of the first ISPOR regional consortium - ISPOR Asia Consortium which was established in 2004. He served as Chair of the Consortium from 2006-8. Before this, he also spearheaded and became the founding chair of the first ISPOR local chapter in Asia – ISPOR Hong Kong Chapter in 1999. He had been a member of the organizing committee of several ISPOR Asia Pacific conferences from 2004-11. He had also taught in a number of ISPOR short courses. Currently he is one of the co-editors of Value in Health Regional Issue, an official publication of ISPOR. In May 2012, he was elected as a member of the ISPOR Board of Directors for 2012-4.



Professor Peter P. Yuen, BA MBA(SUNY Buffalo) PhD(Birmingham) FCHSE(Aust)

Professor 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 in the Department of Management and Marketing of PolyU.

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, and his Doctor of Philosophy degree in Health Economics from the University of Birmingham. Professor Yuen's research involves public policy formulation and evaluation, and health services management. He is an Editor of Public Administration and Policy and an Editorial Committee member of Asia Pacific Journal of Health Management. He is also a consultant for the Hong Kong SAR Government and the Bauhinia Foundation Research Centre on a number of public policy related projects including the West Kowloon Cultural District, Sustainable Built Environment, Subsidized Homeownership, Managed Care, and Health Systems Reform.

Professor Yuen is currently the Chairman of the Federation for Self-financing Tertiary Education (Hong Kong). 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.

Moderators of Parallel Sessions



Professor Hanqin Qiu

Professor, School of Hotel and Tourism Management, PolyU
Editor-in-Chief for Journal of Quality Assurance in Hospitality and Tourism
Guest editors for the International Journal of Contemporary Hospitality Management and Journal of Vacation Marketing on Special Issues for China Hotel and Tourism Development

Panel: ***The International Medical Tourism and Wellness***



Professor Albert Lee

Clinical Professor, School of Public Health and Primary Care, CUHK
Director of Centre for Health Education and Health Promotion, CUHK

Panel: ***Innovative Primary Care***

.



Dr Artie Ng

Principal Lecturer/ Deputy Director, School of Professional Education and Executive Development, PolyU
Board member of CPA Canada (Hong Kong Chapter)
Advisory Group Member - Financial Education Programme for Youth, Investor Education Centre
Fellow of Chartered Institute of Management Accountants (UK)
Fellow of Hong Kong Institute of Certified Public Accountants

Panel: ***Performance Measurement and Management for Health Care Organizations***



Dr Alex Chan

Principal Lecturer, School of Professional Education and Executive Development, PolyU
Chairman of Fair Trade Hong Kong
Vice-Chairman of SynergyNet

Panel: ***Long Term Care and Rehabilitation***



Dr Ben Fong

Senior Lecturer/ Award Leader in Health Studies, School of Professional Education and Executive Development, PolyU
Specialist in Community Medicine
Convenor of the academic discipline of Health and Life Sciences of the CPCE, PolyU

Panel: ***Health Care Reform and Sustainability***



Dr Simon Cheung

Lecturer, School of Professional Education and Executive Development, PolyU
Associate Fellow of the Australasian College of Health Services Management
Associate Fellow of the Hong Kong College of Health Services Executives

Panel: ***Innovation and Higher Education in Health Care***

Programme

Time	Event
1:30pm - 2:00pm	Registration
2:00pm - 2:15pm	Opening Ceremony ***Welcoming Remarks*** **Prof. Timothy W. Tong, PhD** President The Hong Kong Polytechnic University ***Officiating Guest*** **Prof. Sophia Chan, JP** Under Secretary for Food and Health The Government of the Hong Kong Special Administrative Region
2:15pm - 2:45pm	**Keynote Address** Moderator: Prof. Peter Yuen ***The Future Cost of Health and Care*** **Prof. Sir James Mirrlees** Nobel Laureate, and Master of Morningside College and Distinguished Professor-at-Large, The Chinese University of Hong Kong
2:45pm - 3:00pm	**Presentation of Awards for Outstanding Student Papers in Health Studies**
3:00pm - 3:40pm	**Plenary Session I** Moderator: Dr Artie Ng ***The Use of Health Economic Data in Maximizing Health Outcomes - a Global Perspective*** **Prof. Kenneth Lee** Academic Advisor, College of Professional and Continuing Education, and Professor of Pharmacy and Head, School of Pharmacy, Monash University Malaysia
	Plenary Session II Moderator: Dr Ben Fong ***Reforming Hospital Care Financing in Hong Kong: Everyone a Private Patient*** **Prof. Peter P. Yuen** Dean, College of Professional and Continuing Education, and Professor, Department of Management and Marketing, The Hong Kong Polytechnic University
3:40pm - 4:00pm	*Tea Break*
4:00pm – 5:30pm	**Parallel Sessions**

Parallel Sessions and Presenters

A. The International Medical Tourism and Wellness, Chaired by Prof. Hanqin Qiu

1	*Social Impact of the Individual Visit Scheme (IVS) of Chinese Mainland Tourists on Hong Kong: Evidence from Hong Kong Residents* Dr James Shen, City University of Macau, Macau
2	*Holistic Development of Wellness Tourism in Buddhamonthon* Mr Kantatouj Amaranonta, Mae Fah Luang University, Chiang Rai, Thailand
3	*Emerging Trends of Asian Medical Tourism* Prof. Hanqin Qiu, PolyU, HK
4	*Medical Tourism Development in Hong Kong: an Assessment of the Barriers* Dr Deniz Kucukusta, PolyU, HK
5	*Image of Thailand as a Medical Tourism Destination* Dr Pimtong Tavitiyaman, PolyU SPEED, HK
6	*Service Design for Medical Tourism in a Smart City* Dr Ken K.L. Peng, PolyU SPEED, HK / MUST, Taiwan

B. Innovative Primary Care, Chaired by Prof. Albert Lee

1	*Paradigm Shift for Primary Health Care Delivery: Concept of Community Health Practitioners* Dr Lancelot WH Mui, CUHK, HK Prof. Albert Lee, CUHK, HK
2	*Community Based Rehabilitation: Opportunities and Limitation* Prof. Kenneth Fong, PolyU, HK Dr Kar-wai Tong, Hong Kong Baptist University, HK
3	*Digitalization of Medication Therapy Management: Integrating Smartphone Apps into Continuum of Care* Dr Daisy S. M. Lee, PolyU SPEED, HK Ms Tebby Lee, United Christian Hospital, HK Mr Gary Chong, United Christian Hospital, HK
4	*Mobility Performance and Foot Problems in Older People* Ms Pui-ling Li, PolyU, HK
5	*A Review of Three Dimensional Knitted Spacer Fabrics for Medicine and Healthcare and Recent Developments* Ms Shuk Fan Tong, PolyU, HK

C. Performance Measurement and Management for Health Care Organizations, Chaired by Dr Artie Ng

1	*Organization Change through an Intimacy & Sexuality Project, with SSLD Underpinning* Ms Maria Chu, The Yee Hong Centre for Geriatric Care, Toronto, Canada
2	*Performance Measurement for Governance of Social Enterprise: Enhancing Accountability and Innovation in Elderly Homes* Dr Artie Ng, PolyU SPEED, HK Dr Tiffany Leung, PolyU SPEED, HK

3	*Determinants of Inpatient Expenditure for Chronic Kidney Failure Patients in Guangzhou, China* Dr Hui Zhang (Vivienne), Sun Yat-sen University, China
4	*Should the Activity-Based Costing (ABC) Method be Applied to the Hong Kong Healthcare Service Industry?* Dr Bosco Yu, PolyU SPEED, HK
5	*Students' Perceptions on Integrity of Healthcare Professionals in Hong Kong* Ms Wong Sze Yin Shirley, PolyU HKCC, HK

D. Long Term Care and Rehabilitation, Chaired by Dr Alex Chan

1	*Preferred Place of Care and Death among Elderly Patients Receiving Palliative Care* Dr Woo Kam Wing, Caritas Medical Centre, HK
2	*Mechanical Evaluation of Woven Glass-Fiber Reinforced Composites for Rigid Scoliosis Brace* Dr Sun-pui Ng, PolyU HKCC, HK
3	*Effects of Slippers on Sit-to-Stand Transition in Older Women* Ms Wai-ting Lo, PolyU, HK
4	*Chemical Issues in Pharmaceutical Supply Chain: a Case of Tamiflu* Mr Yui Yip Lau, PolyU HKCC, HK
5	*In-school Screening for Adolescent Idiopathic Scoliosis: Results of Adam's Forward Bending Test and Shoulder Obliquity in Adolescent Girls in Hong Kong* Ms Lai-Hing Fok, PolyU, HK
6	*Behavioral Training of Paraspinal Muscles in Sitting Position with Biofeedback for Adolescent Patients with Mild Idiopathic Scoliosis* Mr Garcia Kwok, PolyU, HK

E. Health Care Reform and Sustainability, Chaired by Dr Ben Fong

1	*Finding New Pathways to Ensure the Financial Sustainability of China's Medical Insurance System for Urban Employees* Dr Sabrina CY Luk, Kunming University of Science and Technology, China
2	*Easing the Manpower Shortage Challenge through Exploring Alternative Employee Resourcing Models* Dr Florence Ho, PolyU SPEED, HK
3	*Development of Private Hospitals in Hong Kong: An Institutional Explanation* Dr Alex Chan, PolyU SPEED, HK
4	*Public Private Partnership in Health Care in Hong Kong* Dr Ben Fong, PolyU SPEED, HK
5	*Ageing Society Encourages Public and Private Movement in Thailand* Miss Charuwan Laosumrit, Mahidol University International College/ Kasikorn Research Center, Thailand
6	*Towards Exposure-Based Health Impact Indicators: Application to Hong Kong* Mr Duan Guangdong, City University of Hong Kong, HK

F. Innovation and Higher Education in Health Care, Chaired by Dr Simon Cheung

1	*An Investigation of Fruits and Vegetables Consumption among University Students in Hong Kong*

	Dr Simon Cheung, PolyU SPEED, HK
2	*Complementary and Alternative Medicine (CAM) Regulation and Education for Health Care Professionals: A Comparison between The UK and Hong Kong* Prof. Graeme D. Smith, Edinburgh Napier University, UK Dr Fowie Ng, PolyU SPEED, HK
3	*Using M-Learning to Exploit Visual and Kinaesthetic Modes in Health Education* Dr Adam Wong, PolyU SPEED, HK
4	*Effect of Postural Strap on the Relief of Work-related Muscle Pain: A Pilot Study* Dr Gabriel Chan, PolyU HKCC, HK
5	*A Review of Innovative Types of Braces for Adolescent Idiopathic Scoliosis (AIS)* Ms Wing-Yu Chan, PolyU, HK
6	*The Influence of Health and Beauty Perception on Medical Tourism Intentions: A Learning Lesson from Korea for Hong Kong* Dr Joseph L.M. Lee, PolyU HKCC, HK

Keynote Address

The Future Cost of Health and Care

Prof. Sir James Mirrlees
The Chinese University of Hong Kong

Abstract
Contrary to common belief, it is likely that future costs of care and medical treatment of the elderly need not rise much, if at all, as a proportion of GDP. But people might well prefer that more of their country's income be spent on health and care, for the sake of improved quality and length of life. That should not be regretted or resisted.

Plenary Session I

The Use of Health Economic Data in Maximizing Health Outcomes - a Global Perspective

Prof. Kenneth KC Lee
School of Pharmacy, Monash University Malaysia

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

Abstract
Cost of healthcare is rising at an alarming rate around the globe. The reasons for this include a change in demographics, an increase in life expectancy due to better healthcare services, ever escalating costs of new health technologies, and an increasing demand from the general public. As a result, the budget for healthcare has become much tighter than before. Budget holders must hence prioritize and make choices in funding new technologies. In order to be more answerable to the public, decision makers have changed in rationing priorities from a traditional empirical to the recent evidence-based approach. Health technology assessment (HTA) new therapies or services can be used to compare costs and benefits between competitors, thus identifying the most cost-effective treatment using evidence generated in an unbiased manner. This evidence will help inform decision makers in maximizing health benefits for a given allocation of health resources. The main objective of the presentation is to provide an overview of health economics in drug evaluation from a global perspective and to explain how it may help improve health outcomes.

Plenary Session II

Reforming Hospital Care Financing in Hong Kong: Everyone a Private Patient

Prof. Peter P. Yuen
College of Professional and Continuing Education, and Professor, Department of Management and Marketing, The Hong Kong Polytechnic University

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

Abstract
This study attempts to assess the efficiency of Hong Kong's existing public hospital care financing. Time series data on input and output of public hospitals suggest that while output has increased over time, resources provided has increased even more, implying a steady decline in efficiency (even after adjusting for aging population and outpatient provisions). Alternative financing arrangement in the form of private health insurance is then examined. The result indicates that it is not financially infeasible to provide private health insurance to all. Everyone can be a private patient. The separation of financing and provision is recommended as the first step towards this goal.

Parallel Sessions

A. The International Medical Tourism and Wellness

Social Impact of Individual Visit Scheme (IVS) of Chinese Mainland Tourists on Hong Kong: Evidence from Hong Kong Residents

James Huawen Shen[a]*, Hanqin Qiu[b], Xi Li[a]

[a] *Faculty of International Tourism Management, City University of Macau*

[b] *School of Hotel and Tourism Management, The Hong Kong Polytechnic University, Hung Hum, Hong Kong*

*Corresponding author: Dr James Shen (jamesshen@cityu.edu.mo)

Abstract

This study is basically an explorative and explanatory research, with the overall purpose to identify, explore and analyze the social impact of IVS in the outbound destination of Hong Kong. The specific research objectives of this study are (1) to identify the major dimensions of the social impacts of IVS from the perspectives of local residents; (2) to investigate the impacts of the social dimensions of IVS on the attitudinal and behavioral inclinations of the local residents; (3) to propose practical measures to enhance the social sustainability of the IVS as a special mode of travel by mainland visitors to Hong Kong. Altogether there are five research components that are included, namely perceptions of government regulations, perceptions of social impact, level of place attachment, attitude and behavioral intentions. Both qualitative and quantitative research methodologies were employed in the study. The results of the study confirmed the applicability of classical models on social impact of tourism development, and indicate that the social impact of IVS can be distinguished by local residents in social, economic as well as cultural terms according to their social representations. Moreover, four hypothesized relationships tested, were all supported, except for one with minor modification. Specifically, social and cultural dimensions wielded significant impacts on resident attitude, whereas the economic dimensions did not influence resident attitude. In turn, resident attitude had a significant positive impact on behavioral intention. Meanwhile, both level of place attachment and perceptions of government regulations showed positive influences on both resident attitude and behavioral intention.

Holistic Development of Wellness Tourism in Buddhamonthon

Kantatouj Amaranonta [a]*, Nantaporn Mingkwan[b]

[a] *Business Administration Department, School of Management, Mae Fah Luang University, Chiang Rai, Thailand*

[b] *Hospitality Industry Management Department, School of Management, Mae Fah Luang University, Chiang Rai, Thailand*

*Corresponding author: Kantatouj Amaranonta (kantatouj.ama@mfu.ac.th)

Abstract

The purpose of this study aims to understand the potential of promoting Buddhamonthon as the tourism site for the wellness of the people since Buddhamonthon was the important religious site of Thailand and many activities which contribute to the wellness of the people were held at Buddhamonthon. The researchers used the qualitative method by using in-depth interviews with the informants (professionals from tourism field, local government officials and Buddhamonthon's visitors). The empirical results from this research revealed that Buddhamonthon was full of potentials to be developed as the place for wellness tourism since many activities which were held in Buddhamonthon (e.g. meditation and exercise in the park) could contribute to the wellness of the people who visited to Buddhamonthon and this also generated the sound mental health of these visitors. Furthermore, conclusion and recommendations were also provided in this research.

Emerging Trends of Asian Medical Tourism

Hanqin Qiu
School of Hotel and Tourism Management, The Hong Kong Polytechnic University, Hung Hom, Hong Kong

Correspondence: Professor Hanqin Qiu (hanqin.zhang.qiu@polyu.edu.hk)

Abstract
Medical tourism, travelling for treatment and care, is an emerging phenomenon in the healthcare and travel industry that enables tourists to receive medical services through travel to have better service quality at lower price. It has been estimated that "the global medical tourism industry currently generates annual revenues up to US$60 billion, with 20% annual growth" (Horowitz, Rosensweig, and Jones, 2007). In Southeast Asia, medical tourism has been developed quickly since the 1997 Asian financial crisis. India, Singapore and Thailand are well established medical tourism destinations, attracting large numbers of foreign patients and generating substantial revenue from their medical services. With great development potential of medical tourism in China, Beijing, Shanghai, Hainan, Chengdu and more cities are promoting medical tourism with their own distinctive characteristics. The purpose of this panel is to report the most recent development of medical tourism in Asia. Examples from Chinese herbal medical tourism in China, practices of medical tourism in Thailand, service design for medical tourism in Taiwan, and the potential challenges faced by the medical tourism development in Hong Kong will be shared by the panel speakers.

Medical Tourism Development in Hong Kong: an Assessment of the Barriers

Deniz Kucukusta
School of Hotel and Tourism Management, The Hong Kong Polytechnic University, Hung Hom, Hong Kong

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Abstract
Hong Kong aims to be a centre for medical excellence in the region, and is well-known to deliver high-quality healthcare services. Hong Kong's hospitals operate to the highest standards and feature medical practitioners who are the best in their fields of specialization. The main purpose of this study is to investigate, analyse, and explain the factors influencing the development of medical tourism in Hong Kong based on data gathered from private and public hospitals, government bodies, institutions, and doctors. A qualitative research method was adopted to collect data from representatives of private and public hospitals, government bodies, and medical institutions. Several strategies for lifting these barriers are suggested.

Image of Thailand as a Medical Tourism Destination

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Abstract
Medical tourism is an industry that integrates the medical and tourism sectors and is a specific form of tourism that people travel to overseas countries to obtain some medical treatments. The concept of medical tourism has been investigated by many scholars. However, very few literatures cover the development of medical tourism in Thailand and there is a lack of a theoretical model to describe medical tourist behaviors. This study aims to fill research gaps by focusing on the customer aspect in an effort to examine the relationship among perceived destination image, perceived quality, perceived value, patient satisfaction, and behavioral intention.

Service Design for Medical Tourism in a Smart City

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Abstract
The purpose of this study aims to discuss a service design for medical tourism in a smart city, contrasting the practice of contemporary medical tourism in Taiwan. First, we survey the issues of medical tourism in a smart city. Next, we introduce the Technology Roadmapping (TRM) as a framework for supporting research and development of future technologies and services for medical tourism in a smart city. Last, the possible service design from the interdisciplinary field of service science, management, engineering and design (SSMED) is presented through the methodology of service experience engineering (SEE). Results show that the future of medical tourism in a smart city shall be healing, healthy and happy services.

B. Innovative Primary Care

Paradigm-Shift for Primary Health Care Delivery: Concept of Community Health Practitioners

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Abstract

Publication of the Government's strategy document in 2010 highlights the direction of primary care development in Hong Kong. It calls for higher level of involvement of the health care sector, both in depth and breadth, to improve quality of care. Execution of the strategic plan requires training of existing and new health care workforce to cope with the many non-health care factors that affect health. Alternatively, with proper training, a highly-motivated workforce that brings in non-health care ideas can become a critical part of the long term development of community-based care in Hong Kong. The presenters will also illustrate the proposed new model of health care in community breaking through the conventional health boundary by alternative source of support to the community meeting the needs of age-friendly city.

Community Based Rehabilitation: Opportunities and Limitations

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Abstract

Since the publication of Building a Healthy Tomorrow for public consultation in 2005, which was considered the first attempt to outline a future healthcare model by better differentiating the roles of primary, secondary and tertiary care as well as home care and community support, the Hong Kong Government has made some initiatives for community-based rehabilitation, for example, the launch of an elderly healthcare voucher scheme since 2009 which has become a recurrent support programme and been extended for the use of rehabilitation services, and funding home care with community outreach and professional support facilities for patients' convalescence and rehabilitation outside hospitals. The Social Welfare Department has also funded the development of four Community Rehabilitation Day Centres (CRDCs) since 2007, aiming at providing goal-oriented and time-defined rehabilitation services for discharged patients from the Hospital Authority with a view to enhancing their independent living in the community and social integration. The Chief Executive of Hong Kong has further promoted the concepts of community care in his 2015 Policy Address by, for instance, providing more choices for the elderly via other voucher schemes in the contexts of community care services and residential care services (para 121), building mutual help community networks among residents of new public rental housing estates (para 133), along with encouraging active ageing through senior volunteerism, a $2 public transport fare concession scheme, and residences and reverse mortgage programmes for the aged (paras 143-146). Although there are some social and healthcare policies in place, the services in community-based rehabilitation are still fragmented and limited. In this seminar, Kenneth Fong and Kar-wai Tong will share their views on the current opportunities and limitations of community-based rehabilitation in Hong Kong.

Digitalization of Medication Therapy Management: Integrating Smartphone Apps into Continuum of Care

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Abstract

Mobile health (mHealth) technology is transforming health care delivery in the continuum of care through co-creation of treatment experience and empowerment of patient self-management. A recent study by IMS Health estimates that there are 165,000 mobile health apps available in app stores. Reported by government statistics, Hong Kong has the highest smartphone penetration rate (87%) in Asia Pacific and ranks top 10 in the world. Smartphones, having an unparalleled impact on how Hong Kong people live our lives, play an ever-increasing role in medication therapy management. According to the latest Patient Experience and Satisfaction Survey (PESS) conducted by the Hospital Authority (HA), 50% of patients reported deficiency of medication side effects counselling when discharged from hospital. Henceforth, smartphone application is posited to consummate continuum of care and combat resources constraint of hospital pharmacy through mobile provision of drug information. Currently, there are two pharmacy and drug-related information mobile apps (one developed by HA and the other one by United Christian Hospital) available for public hospital patients. However, total cumulative downloads of both apps are around 30,000 in the last four years since development. The low adoption of mobile apps has allegedly restrained the digital transformation of medication therapy management for HA hospitals. This study aims to investigate factors contributing to drug-related mobile app adoption and examine drug-related information pertaining to continuum of care through mobile platform. The research design incorporates self-administrated questionnaires to be conducted at the pharmacy of United Christian Hospital with patients who are users and non-users of the two mobile apps (DREAMS - Drugs Ready E-Alert Me System and TouchMed) available to HA patients. The findings of this study will provide implication to HA management to overcome barriers to mHealth adoption and transition to digitalization of medication therapy management.

Mobility Performance and Foot Problems in Older People

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Abstract

Foot deformities and unsteadiness of gait are common issues amongst older people. Ageing together with environmental influences, such as footwear, are closely associated with increased postural sway, poor balance control, and even falling. This study therefore aims to investigate the foot deformities and foot sole morphology amongst older people. By using the Tinetti Performance-Oriented Mobility Assessment (POMA), the balance and gait performance of older people when walking in slippers are assessed so that an overall mobility score for both balance and gait performance is obtained. A total of 52 elderly people aged 65-95 years old, including 45 women and 7 men (mean: 81.48; SD: 6.70) are recruited for this study. The results indicate that the most common foot problems are hallux valgus (51.9%) and bunionettes (34.6%). The footprint measurements indicate that the prevalence of pes cavus (high arches) is equally present in both genders. Regardless of the foot deformities, 84.6% performed satisfactorily in mobility assessments (POMA scores >24) when walking in slippers. The only footprint measurement that is associated with mobility performance in these older people with the use of slip-on mule slippers is the arch angle.

A Review of Three Dimensional Knitted Spacer Fabrics for Medicine and Healthcare and Recent Developments

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Abstract
Over the years, fabrics are no longer limited to two-dimensional (2D) materials as more and more researchers are now interested in three-dimensional (3D) fabrics, such as knitted spacer fabrics, due to the development of various textile technologies. Different methods have therefore been developed to manufacture 3D knitted spacer fabrics in the textile industries. Due to their versatile properties, which are superior to traditional 2D fabrics, 3D fabrics are widely used in different areas, including aircrafts, automobiles, furniture, civil infrastructures and medical prostheses. In this paper, a review will be provided of current research work and developments related to the application of 3D spacer fabrics in medicine and healthcare. A multitude of search engines, including Google Scholar and Scopus, are used. Search strings used included "3D knitted spacer fabrics" and "medical", "healthcare" or "hygiene". Papers published in the past ten years are reviewed. After reading the abstracts and papers, 19 related papers involved the investigation and development of 3D knitted spacer fabrics for medicine and healthcare are selected and summarized in this paper. Both 3D warp and weft knitted spacer fabrics are reviewed as they have their own unique characteristics which render them suitable for different uses in the medical area. Apart from their excellent heat and moisture regulating properties, their washability and reusability are also key factors that make 3D knitted spacer fabrics a commonly used material in medicine. Not only are they considered to be alternatives in disposable medical products, but also used in functional bandages, pressure therapy garments, absorbent medical textiles, decubitus mats, orthopaedic materials and even implantable devices.

C. Performance Measurement and Management for Health Care Organizations

Organization Change through an Intimacy & Sexuality Project, with SSLD Underpinning

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Abstract

Neglecting intimacy and sexual needs of the older people is one of the key challenges in the area of gerontology. Issues related to these needs of seniors are taboo and being overlooked. There is insufficient available knowledge and skill training materials to help staff of the long-term care facilities and of the community settings to learn to support intimacy needs of seniors. This project, involving one of the largest non-profit nursing home and senior services centres in Canada, breaks the cultural silence and brings forward the importance of organisational change in preparing staff to address senior sexuality and intimacy issues. It demonstrates how altering the existing organisational culture and managerial approach to client care using the Strategies and Skills Learning and Development (SSLD) System can produce a paradigm shift in senior care. The SSLD framework with an All-Win Design ensures that the needs of the seniors, their family members, professional staff and the organisation will be taken into account. Indicators of successful changes include altered perceptions and approaches by staff, the adoption of a psychosocial model; a shift from a behavior-focused to a needs-focused approach; and the adoption of staff empowerment and competency oriented approaches.

Performance Measurement for Governance of Social Enterprise: Enhancing Accountability and Innovation in Elderly Homes

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Abstract

The aging societies around the world increasingly create demand on service providers of elderly homes (EHs). Such organizations, being both knowledge and service-intensive, are considered socially responsible enterprises for their humanity services to take care of the elderly who are a vulnerable group in the society. Nevertheless, there are concerns about their overall performance and the limited financial resources allocated for their operations. To deal with potential moral hazard, performance measurement system (PMS) and management control could play a significant role to the performance of services delivered by these publicly-funded organizations (Spekléa and Verbeeten, 2014). Use of a comprehensive PMS would also support development of a mental model for management to enhance positive performance (Hall, 2011). The function of management accounting is instrumental for the development of a well-balanced, comprehensive PMS that accounts for an organization's service while fulfilling social responsibilities (Franco-Santosa, 2012). With reference to a prior study on healthcare organization (Yuen and Ng, 2012), this paper proposes a balanced PMS framework designed for EHs to help ensure proper governance of resources provided by both public and private sources for quality service delivery.

Determinants of Inpatient Expenditure for Chronic Kidney Failure Patients in Guangzhou, China

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Abstract

Information concerning the treatment costs of Chronic Kidney Failure is scarce in China. This study aims to quantify health care resource utilization, investigate the direct medical costs for inpatient services of Chronic Kidney Failure, and explore its determinants in Guangzhou, China. Direct medical costs of inpatient services for Chronic Kidney Failure were drawn from the reimbursement claim database in Guangzhou City, which covers the entire enrollees of Urban Employee Basic Medical Insurance scheme and Urban Resident Basic Medical Insurance scheme. The records of patients who were admitted to hospitals between January 2010 and December 2012 with a diagnosis of Chronic Kidney Failure were all included. Descriptive and regression analyses (through the Extended Estimating Equations approach – extended generalized linear model) were conducted to study the determinants of direct hospitalization costs. A total of 5,823 hospitalization records were identified. The mean (standard deviation, SD) age of patients was 60 (17) years old and the majority were male (55%). Patients were more likely to receive inpatient treatments at tertiary hospitals (82%), followed by secondary (17%) and primary hospitals (1%). The mean (SD) of direct hospital costs per visit was 15,790 (22,476) Chinese Yuan, among which the medication costs account for 36% whereas the out-of-pocket expenses (OOP) account for 25% of total direct hospital costs. The mean (SD) length of stay was 15 (13) days. Key regression analysis results suggest that age, the type of basic medical insurance schemes, hospital levels, length of stay, and whether the patient had received kidney transplant were all significantly associated with the total direct inpatient services costs (all $P<0.05$). Both demand and supply side factors were significantly associated with the direct inpatient services costs of Chronic Kidney Failure. The establishment of urban basic medical insurance schemes has reduced the financial burden for the insured urban population.

Should the Activity-Based Costing (ABC) Method be Applied to the Hong Kong Healthcare Service Industry?

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Abstract

One management problem in the healthcare service industry is the cost indicators in healthcare are usually prepared on aggregate basis without distinction of cost in different healthcare services. The lack of information on different healthcare cost will hinder the resources allocation planning for the public sector healthcare service provider such as the Hong Kong Hospital Authority (HA) and the price-cost matching for the private sector healthcare service providers such as private hospitals and even on the premium-cost estimation for the medical insurers. In US, a new costing method, activity-based costing (ABC), was suggested to apply to the healthcare industry in the 1990s and since then, many case studies were done to investigate the design and the procedures of ABC that will be appropriate for different healthcare service providers and the benefits of implementing ABC in the healthcare service industry in US. Results of the studies generally show that ABC can provide better understanding of the costs in treating different health problems and help the administrators in healthcare service making decision in resources allocation. Recently, an improved version of ABC called, time-driven activity-based costing, was suggested by Professor Kaplan from the Harvard Business School to apply in healthcare service. However, there is a lack of discussion on applying these newer costing methods to the healthcare service industry in Hong Kong. This presentation aims at reviewing the literature on the application of ABC in the healthcare service industry and exploring the possibility of adopting ABC in the Hong Kong healthcare service industry, may be with the HA taking the lead. The HA will be an interesting case because it is fully funded by the Government and it has the responsibility to make sure that the resources are allocated in the most efficient way.

Students' Perceptions on Integrity of Healthcare Professionals in Hong Kong

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Abstract

Professional integrity is an important outcome in the curriculum of many healthcare disciplines and related professional training. However, integrity is a personal conduct which is seen but difficult to measure and the learning outcomes of professional integrity has to be measured in a more tangible manner. Also, preparing new blood of healthcare professionals with a mindset that should pay high regard to integrity is of prime importance. The aim of this study is to examine students' perceptions of healthcare professional integrity and to prepare them for integrity conflicts in their future healthcare workplace. In survey 1 (n=105), majority of respondents agreed that health professionals should (a) take pride in doing their job well (98.1%); (b) seek development in improving skills (99%), (c) not satisfy with substandard result and should seek to put things right (91.4%); (d) be prepared to acknowledge mistakes and take appropriate steps to prevent mistakes from happening again (100%) and (e) show respects to others who consult them for their professional capacity (99%). Majority of respondents (96.2%) would report the case of smacking of elderly by a healthcare worker in a residential care home. The most expressed aspects of professional integrity in this case was Respect to elderly (56.2%), Proper behaviour of healthcare professionals expected (52.4%), Probity (39%), Responsibility and Reliability (28.6%), Professional standards (28.6%), and Upholding image of health professionals by self-respectability (25.7%). In the investigation of acceptability of professional integrity in survey 2 (n=129), there was an increased number of respondents (40.3%) who expressed Neutral for a case in which a health professional was convicted with common assault during the Umbrella Revolution 2014 in Hong Kong. A total of 10.1% respondents expressed that such case of common assault was acceptable as they perceived that Civil disobedience should not violate the integrity of a healthcare professional. The implication of this study is to uphold the importance of professional integrity in health professionals-to-be and to strengthen the development of professional integrity in Hong Kong.

D. Long Term Care and Rehabilitation

Preferred Place of Care and Death among Elderly Patients Receiving Palliative Care

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Abstract

One of the main goals of palliative care is to facilitate patients to receive care and die in their preferred place. This is the sub-group analysis of a cross-sectional study performed in our unit from 1st February 2012 to 30th June 2012. Patients' preferred place of care (PPC) in the last month of life and preferred place of death (PPD), demographic and medical data were collected. Among 102 respondents, 65 patients with age above 65 years were included in this analysis. The median age was 77 years, and 41 participants were male. The most preferred place of care and death was palliative care unit (PCU, 35.4% and 44.6%), followed by hospital (33.8% and 36.9%). Home was the PPC and PPD among 24.6% and 13.8% respondents, while old age home (OAH) was the PPC and PPD of two patients and one patient respectively. Compared with patients who chose home as PPC and PPD, patients who preferred PCU were significantly younger (PPC median age 81. vs. 74 years, p=0.002, PPD 80 vs. 74 years, p=0.026 using Mann-Whiteney U test). Patients preferred PCU death were also younger than patients who preferred hospital death. (74 vs. 79.5 years, p=0.028). Patients who chose home as PPC had higher Charlson Comorbidity index than those who preferred PCU or hospital. (10.5 vs. 10.0, p=0.024; 10.5 vs. 9.0, p=0.024). Patients who preferred home death had poorer Palliative Performance Scale (60 vs. 75, p=0.020) and poorer appetite (Edmonton Symptom Assessment System 5/10 vs. 4/10, p=0.029) than patients choosing hospital. PCU was the most preferred place of care and death. Residential home was not a major preference and that for OAH was uncommon. Palliative care service at the last month of life and the dying phase for the elderly cancer patients should be tailored according to the patients' preferences.

Mechanical Evaluation of Woven Glass-Fiber Reinforced Composites for Rigid Scoliosis Brace

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Abstract

Adolescent Idiopathic Scoliosis (AIS) is a prevalent type of chronic illness that a patient's spine gradually develops a side-to-side curvature in late childhood or adolescence. The growth of such abnormal spine curvature may spurt as puberty progresses. To prevent progression of spinal deformities, rigid and weighted plastic braces have been designed to encircle patient's entire trunk but these braces often lead to very low compliance of the patients. Given these issues, the current research proposes the use of woven glass-fiber reinforced plastic (GFRP) composites to replace the existing rigid plastic materials. When fiberglass is weaved and embedded by a thermosetting resin, the overall composite material can have a much higher strength-to-weight ratio and it is very suitable for making lightweight rigid scoliosis braces. Therefore, the aim of the present research is to produce a woven E-glass fiber-reinforced epoxy composite material, which possesses the tensile stiffness and bending rigidity comparable to the plastic material for making conventional rigid brace. Based on a designated volume fraction of fiber, the thickness of the proposed composite material is optimized and hence a rigid GFRP composite brace with reduced weight can be achieved.

Effects of Slippers on Sit-to-Stand Transition of Older Women

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Abstract

The ability to stand up from a chair is an important functional test to assess the lower extremity functions and balance performance of older people. To achieve postural stability, there is the postural transition and coordination of muscle activity involved in that performance is associated with age-related changes in muscular strength in the leg extensors and changes in movement strategies. This study therefore aims to investigate the effects of slippers on the performance of the sit-to-stand transition of older women by using an in-shoe pressure measuring system so that the profile of the gait line pattern in terms of the centre of pressure (COP) excursion, path length and velocity in response to barefoot conditions and when wearing slippers can be collected and compared. Ten healthy females between the ages of 60 and 67 years old (mean: 62.85; SD: 2.81) are recruited for this study. The results indicate that there is no significant difference in the postural stability in the COP parameters between being barefoot and wearing slippers during the sit-to-stand transition. However, it is observed that the wearing of slippers may induce greater medial-lateral COP displacement and higher mean sway velocity. The findings obtained here can provide a better understanding of the importance of developing and investigating indoor slippers in relation to improved postural stability and foot protection in older adults, especially those with balance deficit.

Chemical Issues in Pharmaceutical Supply Chain: A Case of Tamiflu

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Abstract

Primary manufacturing is one of the key components in a standard pharmaceutical supply chain. The primary manufacturing site is responsible for the synthesis of the active ingredient of a drug. In the manufacture or design of new synthetic routes of a drug, the logistics cost, availability of starting materials, number of steps and overall yield are critical factors to be taken into account. In view of the importance of oseltamivir phosphate (Tamiflu) in treatment of influenza, related issues and development in pharmaceutical industry should be addressed and updated. In this paper, we will (1) highlight the concepts of supply chain management (SCM) in pharmaceutical industry; (2) describe the recent advance in the synthetic chemistry of Tamiflu, focusing on the new approaches based on inexpensive starting materials. This paper should be of interest to health care study and is expected to provide insights for the drug and supply chain management industry.

In-school Screening for Adolescent Idiopathic Scoliosis: Results of Adam's Forward Bending Test and Shoulder Obliquity in Adolescent Girls in Hong Kong

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Abstract

In-school screening for adolescent idiopathic scoliosis (AIS) is discussed. The aim of the present study is to describe in-school screening results of Adam's forward bending test and evaluate the shoulder obliquity in adolescent girls in Hong Kong. Between 2012 and 2015, 794 schoolgirls aged 10-13 underwent an in-school scoliosis screening. Students with a scoliometer measurement of ≥3° of the angle of trunk rotation (ATR) during the Adam's forward bending test are referred for a scolioscan, which uses 3D ultrasound. The shoulder balance is measured by using clinical photos of the clavicular angle (CA). The prevalence and percentage of shoulder obliquity in the normal and possible AIS groups are also determined. A positive result in the Adam's forward bending test (ATR ≥3°) is found in 19.4% of the schoolgirls (154 out of 794). Sixty of the girls with ATR ≥3° were invited for a scolioscan and forty-three have positive results with a spinal curve >10° (positive predictive value, 71.7%). 443 students underwent shoulder balance measurement. Shoulder obliquity with CA≥1° or CA≤-1° is found in 25% of the girls. A significantly different occurrence of shoulder obliquity is also found between the normal and possible AIS groups with a positive result in the Adam's forward bending test (ATR ≥3°) (72 out of 364, 19.8% in normal group and 44 out of 79, 55.7% in possible AIS groups, respectively). The results in the Adam's forward bending test and prevalence of shoulder obliquity demonstrate that there is the need for greater awareness of adolescent spinal and postural care in the community.

Behavioral Training of Paraspinal Muscles in Sitting Position with Biofeedback for Adolescent Patients with Mild Idiopathic Scoliosis

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Abstract

Studies that have applied surface electromyography (sEMG) assessments indicate that idiopathic scoliosis patients have significant differences in activity among pairs of muscles in the paraspinal regions. The asymmetrical paraspinal muscle activity is concluded to be a contributing factor for the progression of idiopathic scoliosis. Conservative treatment for mild cases (Cobb angle 10-20^{o}) has been passive in nature, and only periodic checks are provided by doctors. Therefore, in response, an investigation on patients with adolescent idiopathic scoliosis (AIS) on their paraspinal muscle activity and muscle training is carried out to explore the possibility of behavioral training for patients with mild AIS. This study has two objectives: (1) to observe the paraspinal muscle activity of patients with mild AIS during sitting, and (2) to train the paraspinal muscles to achieve relatively more balance as well as a balanced posture. Twelve patients with AIS are recruited. All 12 patients have undergone observation of their paraspinal muscle activity with the application of EMG, and 20 sessions of behavioral training in the sitting posture. The EMG data obtained prior to the training indicate that during the habitual sitting posture, the RMS sEMG ratio deviates from the tested value of 1 and follows a trend of significant differences at the erector spinae at lumbar region for some subjects. In addition, after 20 sessions of behavioral training, the subjects provide relatively more balanced EMG data compared to those before the training. None have a significant deviation from the tested value of 1. It is believed that through the behavioral training, AIS patients can achieve a more balanced sitting posture, and thus, control the progression of their spinal deformity.

E. Health Care Reform and Sustainability

Finding New Pathways to Ensure the Financial Sustainability of China's Medical Insurance System for Urban Employees

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Abstract
Since 1998, the Chinese government has implemented a mandatory insurance program, the Urban Employee Basic Medical Insurance (UEBMI), to cover medical costs incurred in outpatient treatment and hospitalization services. Due to the rapid growth of China's elderly population and rising medical costs, the Chinese government faces increasing challenges to establish a responsive and financially sustainable medical insurance system in order to respond to changing needs and demands. The UEBMI is implemented within a specific political and socio-economic context. It is shaped by the combining forces of institutions, interests and ideas. This paper aims at examining why the UEBMI system is not financially sustainable. It aims at studying the problems that have plagued the current UEBMI system, the government's response to these problems, and making policy recommendations that can fix these problems. This paper argues that establishing a financially sustainable medical insurance system requires the government to make unremitting efforts to strengthen the administration of the insurance fund, reform drug price control policy and hospital system. This paper provides the most updated information about the UEBMI in China.

Easing the Manpower Shortage Challenge through Exploring Alternative Employee Resourcing Models

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Abstract

At present, Hong Kong's elderly population stands at about 1.07 million. One in seven Hong Kong people is aged 65 or above. The ratio will rise to one in three (or 2.56 million elderly people) by 2041. At least 26% of those aged 85 or above require residential care as the group of those aged between 75 and 80 and above has risen markedly. An ageing population presents a two-pronged challenge. It is estimated that additional 5,000 staff are needed on top of the 20,000 already working in the elderly homes. On the other hand, a large number of frontline workers will be entering into their retirement age. While the Government and the elderly care sector have made various efforts in putting forward new strategies and pilot projects in order to alleviate the problem, including setting up training programmes to attract youth and homemakers to join the labour market. In this paper, we will be looking at the challenges that the elderly service sector is faced with, in particular, the acute shortage of frontline workers. We will be exploring other viable options, like tapping the potential of the "young-olds" and retirees to re-enter the labour market.

Development of Private Hospitals in Hong Kong: an Institutional Explanation

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Abstract
The Hong Kong government proposes the Voluntary Health Insurance Scheme in order to alleviate the healthcare financing burden on tax. The viability of the Scheme depends on whether the capacity of private hospitals will increase significantly in order to meet the projected increase of demand after the implementation of the scheme. To gauge the future development of private hospitals, this paper reviews the development of the private hospitals. Overall, the development of private hospitals can be described as stagnant. There has been no new private hospital for more than two decades. Private hospitals often complain about unfair competition from the Hospital Authority which is heavily subsidized by the government. However, the stagnation began in the 1980s or even earlier, at least a decade before the Hospital Authority was established. I argue that the sluggish development of private hospitals can be traced to three problems, including the lack of transparency and standardization of fee-charging, the variability of the quality of healthcare service, and the management problems related to corporate governance and others. However, these problems of private hospitals need to be further traced to the institutional environment that they are facing, characterized by government regulation which is minimal, and the fiercest resistance of the medical profession to any proposal of healthcare reform which appears to infringe its professional autonomy. The problems of private hospitals are a result of their adaptation to specific institutional environment. However, institutions are sticky. Without a fundamental revamping of this institutional environment that private hospitals have been facing, there is no reason to expect that private hospitals will pick up the speed to increase its capacity suddenly. In this light, one cannot escape from the conclusion that the prospect of the Voluntary Health Insurance Scheme is gloomy.

Public Private Partnership in Health Care in Hong Kong

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Abstract
The Hong Kong Government is committed to involving the private sector to provide better and more efficient public facilities and services to encourage innovation, to enhance productivity, to speed up project and service delivery, and to increase opportunities for investment in Hong Kong. Some merits of Public Private Partnerships (PPPs) include utilizing the skills and experience, access to technology, and innovation of the private sector for better delivery of public services and enhancing unity of responsibilities for delivering services. Potential problems are unreliable levels of service and greater secrecy and lack of transparency resulting in benefits not being shared with the public agency. PPP in healthcare is expected to redress the imbalance between the public and private sectors with improvement in the quality of care, better use of the resources, enhanced training and sharing of experience and expertise, and ultimately helping to ensure sustainability of the healthcare system. These will be achieved through savings and enhance cost-effectiveness, optimal use of human resources, facilitating cross-fertilization of expertise and experience and promoting healthy competition and collaboration. In primary care, services are purchased from the private sector, allowing greater choice of services for individuals in the community. In secondary and tertiary care, again services are purchased from the private sector, and private doctors are employed on a part-time basis in public hospitals, particularly in tertiary and specialized services. There are also potential in development of hospital facilities and medical centres of excellence. The Government has been piloting a new model for subsidised primary care services, the Elderly Health Care Voucher Pilot Scheme, which entails the "money-follows-patient" concept. Together with the healthcare profession, the Government is finding the effective strategies for PPP in healthcare.

Aging Society Encourages Public and Private Movement in Thailand

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Abstract

The world's aging population is about to reach two billions in 2050. By the time, Thailand is the first country in ASEAN to become an aging society. That is, such trend significantly impact to public and private responses serving Thai aging population in the future. This study aims to identify the aging society in Thailand. The finding can provide the current situation, related government policy, and business implications to serve Thai aging population in the future. Content analysis is used in this study. The results showed that Thai aged 65 years and above averagely increase four percent annually, and account for eight to ten percent of the population. This figure is expected to reach 27 percent of the population in 2050. Additionally, Thai government is now putting more effort to improvement of elder's safety and security such as upgrade healthcare system nationwide. Secondly, development of elder's health and hygiene for example educating and facilitating elders' general or specific need. Thirdly, development of financial security including extend working life after retirement as well as promote national saving fund to ensure elder's wealthy after stop working. Besides, aging population also creates business or investment opportunities, particularly in the following industries including healthcare, real estate, financial institution, as well as foreign direct investment (FDI) currently develop related projects to serve both retired Thai and non-Thai retirees.

Towards Exposure-Based Health Impact Indicators: Application to Hong Kong

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Abstract

Effective policy for air pollution requires appropriate indicators for the potential health impact of pollutants. Current indicators are based mostly on time-averaged pollutant concentrations. This is potentially misleading as the pollutant exposure is not accounted for directly. Such a situation is particularly relevant in Hong Kong because the urban morphology may cause harmful pollutants to be partially trapped near the pedestrian level, where they may be inhaled by humans over a long time interval. This paper investigates the relevance of pollutant exposure and exposure time to health and describes the applicability of the statistical distribution of exposure times to Mong Kok and Tsim Tsa Tsui, two densely packed areas of Hong Kong. The findings of this study should provide insights for urban planners.

F. Innovation and Higher Education in Health Care

An Investigation of Fruits and Vegetables Consumption among University Students in Hong Kong

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Abstract

Fruits and vegetables are important parts of healthy eating and they provide excellent sources of vitamins, minerals, and dietary fiber in our diet. Those who consume fruits and vegetables regularly have a reduced risk of many chronic diseases. According to the WHO, inadequate consumption of fruits and vegetables may have contributed to as much as 14% of gastrointestinal cancer deaths and 11% of deaths resulted from ischemic heart disease worldwide. Higher risk of all-cause mortality is associated with insufficient intake of fruits and vegetables. Since 2011, Hong Kong has been promoting a *"2 Plus 3 a day"* diet campaign aiming to raise the general public's awareness on consuming a minimum of 2 portions of fruits and 3 portions of vegetables a day. However, recent statistics showed that nearly 81% of people aged 18 – 64 failed to meet this requirement. It is evident that adequate consumption of fruits and vegetables have many health benefits, however, the underlying determinants affecting people's fruits and vegetable consumptions are much less investigated. Researches have shown that healthy behaviours beginning at a younger age are more likely to be maintained in the future. This paper focuses on investigating the determinants of fruits and vegetables consumption behavior among university students in Hong Kong. Cross sectional surveys were conducted in person from mid-October to mid-November 2015. A total of 600 random subjects were selected from different universities in Hong Kong. The results indicated that 87% of students who consumed fruits and vegetables regularly were due to the health effects associated with fruits and vegetables, and nearly half of the subjects (47%) reported that taste of fruits and vegetables had led to their consumptions. Meanwhile, taste, cooking methods and the texture of fruits and vegetables were found to play significant roles in preventing their consumption as well.

Complementary and Alternative Medicine (CAM) Regulation and Education for Health Care Professionals: A Comparison between the UK and Hong Kong

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Abstract

Globally, the use of CAM has increased in last two decades. It has attracted a great deal of healthcare attention from both patients and their carers. In response to this, many higher health care educational institutions have been recommended to incorporate the training of CAM into the curricula of various undergraduate health related programmes. Different strategies have been suggested to enhance the learning outcomes with the knowledge in this area. For those working health care professionals, continuing professional developments in different complementary health care topics are in high demand for the practitioners to enhance their knowledge regarding the usage, regulations, safety and evidence based practice of these approaches. In this report, the current scenarios of the provision of CAM training and regulation for health care professionals in UK and Hong Kong are compared to highlight similarities and differences.

Using M-Learning to Exploit Visual and Kinaesthetic Modes in Health Education

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Abstract
Health education is crucial in producing capable and responsible health practitioners. Therefore, it is important that students in health related studies are assessed comprehensively on a regularly basis to avoid blunders in future practice. However, students in Hong Kong are not keen to respond to prompts from teachers for questions and examples. To overcome this problem, there is a need for an efficient method to engage all the students in a classroom, and evaluate the progress of their learning. Research has shown that Mobile-learning (m-learning) is an effective and efficient way to allow the teacher to engage every student in the classroom and adjust the teaching strategy accordingly. This article discusses aspects of m-learning that are of particular relevance to students in health related studies. For example, the advantages of visual and kinesthetic learning modes can be implemented very cost effectively. The article begins by discussing the benefits of using mobile-learning in the classroom compared with traditional methods. Then it reviews two innovations in m-learning - clickable images and virtual patients. Finally, it looks at the future development of educating health professionals to become mobile application content providers.

Effect of Postural Strap on the Relief of Work-related Muscle Pain: A Pilot Study

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Abstract

When muscles, tendons and joints are stretched for a long period of time, musculoskeletal strains and injuries are common. It is commonly grouped to be tension neck syndrome (TNS). The neck and shoulder regions will be susceptible to fatigue, stiffness, tenderness and pain after prolonged uses of computers, book reading or playing mobile phones. A clavicle support or kinesiology taping used to support the shoulder region is thought to be helpful to relieve the clinical symptoms. This project investigates the biomechanical effects of clavicle support in alternation of posture. 34 subjects were recruited with 7 males and 27 females. The mean of age of the group is 41.1±11.7 years old. All of them have experienced fatigue, stiffness, tenderness and pain in the neck and shoulder regions. The subjects were asked to wear the postural strap for at least 20 days and their head angles, forward shoulder angles and shoulder lengths were calculated. They were required to conduct two surveys on the pain and habits before and after the experimental period. 44.4% of the subjects found that the pain is less than before after they wore for at least 20 days. Before the experiment, subjects indicated an average of 3.74/10 in pain scale. After the experiment, subjects indicated an average of 2.41/10 in the pain scale which showed a statistically different reduction ($P < 0.05$) of pain after using the postural strap. The results showed that a postural strap may be helpful in giving support to the neck and shoulder regions and reduce the musculoskeletal strains.

A Review of Innovative Types of Braces for Adolescent Idiopathic Scoliosis (AIS)

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Abstract

According to the guidelines provided by the International Society on Scoliosis Orthopaedic and Rehabilitation Treatment (SOSORT) in 2011, scoliosis is defined as the three-dimensional deformity of the spine and trunk with a Cobb angle of 10 degrees or greater. Generally, different treatments would be provided for patients in accordance with the degree of the Cobb angle. Bracing treatment is mainly for patients who have a spinal curvature between 21 and 40 degrees. The braces are classified as either rigid or flexible, which aim to correct scoliosis in three main planes and reduce its progression. Most traditional braces are rigid and made of thermoplastics and metals so that they are heavy and uncomfortable to wear. Their rigidity causes difficulties in donning the brace and interferes with typical activities in daily life. Thus, compliance with conventional bracing treatment is low. To overcome the current limitations of rigid braces, some innovative brace designs which focus on improving comfort and reducing restrictions of body movement are available. For example, the SpineCor and TriaC orthosis are representative elastic braces which use elastic bands and a flexible coupling device respectively to correct the curvature but also allow greater mobility of the body. Other new designs, such as the carbon brace, posture correction girdle and light brace also have the same purpose of correcting spinal curvature and allowing more mobility, but done so in different ways. Therefore, the aim of this paper is to provide a review on the design features and materials used for the fabrication of these innovative types of braces.

The Influence of Health and Beauty Perception on Medical Tourism Intentions: A Learning Lesson from Korea for Hong Kong

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Abstract

Medical tourism becomes one of the fastest-growing world businesses since it has been developing rapidly. The aim of this study is to examine the effect of health and beauty perception towards medical tourism, since there is a paucity of studies related to it. This study investigates the influence of health and beauty perception on medical tourism intentions in Korea, a new medical tourism destination. Drawing on the concepts from Health Belief Model, health and beauty perception can be explained in the context of medical tourism. A quantitative method is employed in this study through a survey questionnaire. Data are collected from 428 tertiary students in Korea and then are analyzed using the SPSS statistical software. To assess the construct validity of the measurement scales, reliability tests with the key constructs are conducted. Moreover, the overall structural model is assessed via exploratory factor analysis to test the proposed hypotheses. With regard to medical tour, findings reveal that 'Barrier' and 'Susceptibility' shows a positive significant impact on medical tour intentions. With regard to beauty tour, results indicate that 'Korean medicine benefit' and 'Anxiety' have a significant effect in Korea. This study achieves both theoretical and managerial contributions; however, there are some limitations. Possible future directions for further research in Hong Kong are also explored.

Poster Presentations

List of Poster Presentations

1. *Application of Health Belief Model in Cardiovascular Diseases*
   Chan Chi To
   School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
2. *Application of Theory of Reasoned Action in Prediction of Smoking Cessation*
   Chanice Y.K.Chan
   School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
3. *Review of Colorectal Cancer in Hong Kong Using the Study in South Korea*
   Janice T.Y. Chiu
   School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
4. *Promoting Electronic Health Record (eHR) Sharing System in Hong Kong – What Can We Learn from Taiwan*
   Wing Yan Cheung, Sze Wing Ho, Ka Man Leung, Wang Chi Tse, Wing Tan Tsim, Chun Siu Yick, San Ni Yu
   School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
5. *Prevention of Diabetes: a Strategic Framework for Hong Kong*
   Gigi W.C. Fong
   School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
6. *Health Information Searching Behavior among College Students in Hong Kong: An Exploratory Study*
   Simon T.Y. Cheung, Percy W.T. Ho, Tina M.Y. Wong, Elaine Y. T. Kwok and Peter C. S. Au
   School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
7. *Preventive Strategies for Intimate Partner Violence – a Hong Kong Perspective*
   Percy W.T. Ho
   School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
8. *The Effect of Clavicle Support on Myoelectric Activity of Axioscapular Muscles in Young Women with Chronic Neck and Shoulder Pain during Computer Typing*
   Yuen-shan Ho [a], Kit-lun Yick [a], Sun-pui Ng[b], Hoi-huen Chan[b]
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9. *Study of Medical Nurses' Knowledge about Palliative Care and the Effect of Educational Intervention*
   Carman Yuk Lai Kwok, Teresa Wai Yee Wong
   Department of Medicine & Geriatrics, Caritas Medical Centre, Kowloon, Hong Kong

10. *Aging in Place – the future trend of elderly policy in Hong Kong*
Elaine Y.T. Kwok [a], Ben Y.F. Fong [a] and Vincent C.W. Luk [b]
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[b] *Onward Community Healthcare Service Limited, Kowloon*
11. *Sexual Health Promotion on Contraception among Hong Kong Teenagers*
Y. K. So
School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
12. *Universal Health Care in Hong Kong: Lessons from Taiwan and Singapore*
Man Hin Kan, Ho Sze Ho, Ho Leung, John Wong, Cho Wing Mok
School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
13. *An Analysis of the Use of Vitamin Supplements among College Students in Hong Kong*
Simon T.Y. Cheung, Leon W. Li , Osais G. Hui and Wing Wong
School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
14. *Stay away from "Four-hypers" – Let's Start with Exercise and Healthy Diet!*
M. Y. Wong
School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
15. *Unhealthy Nutrition and Lifestyle Habits: How They Affect Our Health in Short Term and Long Term*
Wong Wai Hong
School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
16. *Health Care Service and Population Aging in Hong Kong*
Deborah Lee, Christy K. W. Leung, Sky K. Y. Sze
School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
17. *Primary health Education in the community Provided by Students of health Studies: Stress urinary Incontinence Care among Female in Hong Kong*
Chong Yu Hin Chris, Cheung Chi Fung, Lee Wai Yin, Cheng Yan Ling, Man Ka Wai, Lun Wing Chi and Wong Sze-Yin Shirley
Hong Kong Community College, The Hong Kong Polytechnic University, Hung Hom, Hong Kong
18. *Regular Physical Exercise and Risks of Heart Disease*
Wong Kai-Hung and Wong Sze-Yin Shirley
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Application of Health Belief Model in Cardiovascular Diseases

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Abstract

The purpose of this research is to examine the reason why people start for prevention and detection of Cardiovascular Disease (CVD) early. It can be explained by perceived seriousness, susceptibility, benefits, barriers and cues to action. The symptoms of CVD can cause physical discomfort and therefore limit the abilities of participating in certain activities. Change in family structure and development of negative emotions and depression are also the unfavourable consequences which may lead to behavioural change. The non-modifiable and modifiable risk factors raise the public awareness of their lifestyles and the risk of getting CVD. People will change their behaviours only if they know those unhealthy behaviours will result in higher risk of CVD. People may be willing to take a step forward because adoption of healthier behaviour can gain life expectancy, and speed up the process of recovery by secondary prevention. For non-health related benefits, it can save medical expenses, and strength the relationship with family and friends. The obstacles of adopting a preventive behaviour could be related to social-environmental peer pressure, moodiness and stress, negative side effects of medicines, and forgetfulness to take pills. Family members, friends, support group and mass media are influential to an individual's motivation of behavioural change. Individuals will only engage in behavioural change as they perceived the threat of CVD, and the perceived benefits outweighing perceived barriers and by the cues. It is suggested that health professionals should organize more health education programmes or campaigns, and provide risk assessments. Then the public can better understand the threat of CVD so that they can be motivated to adopt a healthier behaviour.

Application of Theory of Reasoned Action in Prediction of Smoking Cessation

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Abstract

Smoking is a common and significant public health concern because it is one of the major risk factors in causing chronic diseases such as cardiovascular diseases and cancers. Based on the adverse effects brought by smoking, the Hong Kong government has restricted smoking in public venues, and increased the cigarette tax in order to reduce the number of tobacco users. However, there are still rooms for lowering the number. Theory of Reasoned Action (TRA) is an intrapersonal health behavioural theory that is widely used to predict behaviour intention. Attitudes, subjective norms and perceived behaviour control are the three main ideas in the theory. Although TRA is seldom applied in tobacco use, there is evidence in researches showing the effectiveness of TRA in predicting behaviour intention, for example in condom usage intention, and prediction of intention and attendance at screening programmes. The behaviour intention is appropriately applied with TRA in these practices. The objective of this study to examine the application of TRA in the change of health behavior so as to predict the usefulness in smoking cessation. Based on the findings, smoking cessation among tobacco users can be affected by different factors with the application of TRA. Attitudes can be affected by illnesses, cost of cigarette, smoking rumors and stress. Influence of the surroundings is the main factor of subjective norms. For perceived behavior control, it can be affected by individual's strength of belief and self-efficacy. It appears that even though the Government has done so much work, the effectiveness in smoking cessation still needs to be improved and the plan of action is not comprehensive enough. Therefore, some further actions are necessary to combat smoking in our community. It is recommended to increase the intention of tobacco users on smoking cessation by increasing the motivation towards cessation, providing family and social supports, as well as setting up training centres to develop self-efficacy.

Review of Colorectal Cancer in Hong Kong Using the Study in South Korea

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Abstract

Colorectal cancer is the second common cancer with 4563 new cases (16.4%) in 2012 and second leading cause of cancer deaths in Hong Kong with 1981 deaths (14.6%) in 2013. This situation reflects a phenomenon that not many Hong Kong citizens are involved in colorectal cancer screening. So, it is necessary to promote the importance of colorectal cancer to Hong Kong citizens by identifying their reasons of not to screen for this cancer. This can be done through the Health Belief Model (HBM) study in South Korea, which provides strategies on the levels of prevention, and makes recommendations to those stakeholders in health promotion related to colorectal cancer. The results of the Korean study reflect a condition of not to screen being due to the low self-efficacy to behaviour maintenance (α=0.54) and the few stimulus to act the behaviour (α=0.70). In fact, colorectal cancer can be prevented through primary, secondary, and tertiary preventions. Primary prevention refers to lifestyle changes; secondary prevention refers to screening tests; and tertiary prevention refers to surgery and medication in the hospital. Moreover, Hong Kong Government, local community centers with distinct councilors, mass media, health professionals, family, and friends have very important roles in colorectal cancer health promotion in Hong Kong by providing suitable support to individuals, who should also be respected to have good self-control on environmental stimulus when changing their unhealthy lifestyle.

Promoting Electronic Health Record (eHR) Sharing System in Hong Kong – What Can We Learn from Taiwan

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Abstract

Technology grows fast in recent decades and has contributed to the development of health information system. It is reasonable to expect a capability in developing electronic health record (eHR) in the dual public-private healthcare sectors in Hong Kong, where there is a widespread utilization of information technology (IT) and mobile devices in the community. The Hong Kong Government has established the eHR sharing system to bring about a host of benefits to the community through more efficient health care services, reduction on medical costs as a result of more effective and early treatment. The system would also enhance the availability and transparency of information through sharing of patient records between healthcare providers in both the public and private sectors, with the objectives to reduce the frequency of consultations, to improve the accuracy of diagnosis and patient management, to avoid duplicate investigations and errors associated with paper records, as well as to enable disease surveillance and public health research leading more effective policy formulation. Taiwan has developed its electronic medical record (EMR) system holistically and strategically. The Hong Kong Government can learn from Taiwan as a model for implementing the local eHR Sharing System. Legislation of eHR would be of top priority because it is essential and fundamental to protect the privacy of patients' information and to avoid corruption of the concerned stakeholders. Comprehensive promotion strategies may increase the popularization rate of eHR in Hong Kong. In this regard, Hong Kong can copy the Taiwan practice of providing subsidies and professional training courses offered to hospitals have enhanced the development of EMR that provide a practical framework. Ultimately the eHR sharing system should become a widely-used electronic healthcare system in the public and private health sectors in Hong Kong. The implementation of a comprehensive electronic medical record system would be a possible solution in eliminating the potential obstacles. The Hospital Authority has initiated a few pilot projects since 2006 to facilitate better collaboration on sharing of electronic records between the two sectors. Nonetheless, social marketing and promotion of the system is equally vital for the success of eHR. The Audit Commission has recommended a strategy for stepping up publicity of electronic patient records.

Prevention of Diabetes: a Strategic Framework for Hong Kong

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Abstract

Diabetes is becoming more common and it affects about 10% of the local community. As a public health concern, it is important to reduce the incidence of diabetes, and to keep citizens healthy and free from the disease. The objectives of this study is to raise public awareness of diabetes, to promote a "Healthy City", and to enhance the knowledge related to obesity prevention among children and adolescents. This paper is based on a number of public health concepts such as Health Promotion Planning Cycle, primary prevention and Social Cognitive Theory, with reference to the WHO and relevant experience of other countries in the prevention of diabetes. In order to achieve the objectives, a strategic framework will be required. Primary care is the first point of contact in a health care system since the majority of people can enjoy the services. This strategic framework is a primary prevention and the following priority areas are focused: (i) promote new and strengthen existing health promotion on diabetes; (ii) encourage primary school-based health promotion program; (iii) strengthen engagement of all stakeholders; (iv) with the use of information and tools to improve public health and health knowledge level. This strategic framework is built for the citizens' health in Hong Kong and the key elements for implementation include supportive environment, partnership of different stakeholders and empowerment with public education. In conclusion, focusing on the primary healthcare is the most effective way to lower the prevalence of diabetes, and other common non-communicable diseases. It is expected that successful implementation of the strategy framework will help Hong Kong to establish a sustainable health care system, so that citizens in Hong Kong will maintain a high level of health awareness and be able to make healthier choices. It is time to work together against non-communicable diseases and make Hong Kong a healthy city.

Health Information Searching Behavior among College Students in Hong Kong: An Exploratory Study

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Abstract

The health information asymmetry gap seems to remain large between health professionals and patients around the world. Citizens are not only lacking the appropriate knowledge and information about their health conditions, but they are also unable to properly evaluate this information provided by health professionals. The study aims to investigate the current utilization of health information for disease prevention and health promotion among college students in Hong Kong, to understand how they acquire health information through different electronic media and to what extent they trust these health information. A cross-sectional study was performed between October and November 2015, 821 questionnaires were distributed to respondents in different tertiary institutions in Hong Kong, data were collected and analyzed through SPSS programme. The findings showed that the respondents were most likely to look for health information when they were feeling sick (50.4%). Both male (63.5%) and female (64%) respondents reported that they lacked appropriate health knowledge and it was important for them to obtain this kind of information. A majority of respondents used internet (85.4%) and social media (67%) as their main sources of health information. There were also 60% of respondents who demonstrated doubts towards the reliability of information from the internet (23.3%) and social media (32.9%). There was no significant gender difference in terms of how health information was acquired. Based on the results, it was observed that internet and social media were the principle sources of health information for college students in Hong Kong. However, most of them were unsure about the validity and trustworthiness of this information. To prevent students from obtaining potentially unreliable health information on the internet or from social media platforms, it was recommended that more health promotion should be carried out among local tertiary institutions on enhancing students' awareness in obtaining reliable health information.

Preventive Strategies for Intimate Partner Violence – a Hong Kong Perspective

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Abstract
Intimate Partner Violence (IPV) is a very important social and health issue in Hong Kong. IPV is the violence caused by an intimate partner which leads to several immediate and long-term physical health problems, such as physical injury, gastrointestinal disorders, chronic pain syndromes, as well as mental health problems such as depression and suicidal behavior. Nevertheless, it is not easy for physicians to work with the victims to identify their current situation. Hence, IPV prevention becomes more important. An evidence-based IPV prevention intervention, namely Safe Homes and Respect for Everyone (SHARE) Project, was developed and implemented in Uganda successfully during 2001 to 2009. This paper aims to examine preventive strategies for IPV in Hong Kong by using public health model, and the transtheoretical model is employed as a framework to plan for it. Although Hong Kong has enacted legal policies to protect the IPV victims from abuser, provided many services for supporting the victims, such as the Batterer Intervention Programme and Anti-Violence Programme, and implemented psycho-educational programs for reducing the risk of the reoccurrence of the violence, preventive measures of IPV are not significant enough. In view of this, an IPV prevention programme has been designed to reduce sexual and physical IPV in Hong Kong by raising awareness on women's rights, increasing the number of IPV-related services into the healthcare sector, as well as increasing the awareness on the community of the impact of IPV. The programme aims at changing the general public's attitude and perception on IPV step by step, in order to effectively maintain a respectful relationship and to adequately prevent violence within the school and the general community.

The Effect of Clavicle Support on Myoelectric Activity of Axioscapular Muscles in Young Women with Chronic Neck and Shoulder Pain during Computer Typing

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Abstract

In the current office environment, office personnel are using computers for long periods of time on a daily basis. Consequently, there have been increased reports of work-related neck and upper limb musculoskeletal disorders and tension neck syndrome, which affect countless office workers who use computers, which is also the leading cause of occupational illnesses. In rehabilitation treatment, clavicle support that involves the use of elastic material is prescribed to exert corrective pulling forces at the upper back and stabilise the clavicle and shoulder movements. This study therefore aims to evaluate the effect of clavicle support on the myoelectric activity of the axioscapular group of muscles, including the anterior deltoid (AD), upper trapezius (UT), middle trapezius (MT), and lower trapezius (LT) in young women who experience chronic neck and shoulder pain during computer use. The results indicate that there is an overall significant difference in the %MVE of the axioscapular group of muscles between the use and absence of clavicle support ($t=-2.982$, $p=0.005<0.05$). Amongst the four types of muscles studied, the use of clavicle support has significant effects on the MT and UT muscles. The results will contribute by improving our understanding of clavicle support in association with muscle activity, thereby providing the basis for prescribing suitable rehabilitation treatment and intervention devices in the workplace for the reduction of musculoskeletal disorders.

Study of Medical Nurses' Knowledge about Palliative Care and the Effect of Educational Intervention

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Abstract

Inadequate knowledge in palliative care (PC) leads in poor quality of nursing end-of-life care. This study is to assess nurses' PC knowledge and to evaluate the influence of educational intervention. This is a quasi-experimental pre- and post-test study. The pre-test was conducted in the Department of Medicine and Geriatrics, Caritas Medical Centre between 1st and 11th August 2015. All medical nurses were invited to participate. The intervention consisted of two identical 90 minutes case-based lecture on 12th August 2015. Before and immediately after the intervention, the participating nurses were anonymously assessed by filling up a self-administered questionnaire – Palliative Care Nursing Quiz (PCNQ), which was a validated quiz assessing nurses' knowledge in palliative care. PCNQ consisted of 3 domains, including (1) "Philosophy of palliative care", (2) "Psychosocial and spiritual aspects" and (3) "Pain and symptom management". The full mark was 20. Descriptive statistics and t-test were applied to compare the differences in knowledge before and after the intervention. More than 80% of nurses returned the baseline PCNQ (227 out of 280). Around 70% were Registered Nurse (n=158) and more than half (n=123) had more than 10 years professional experience. Among the respondents, 109 nurses (48.0%) attended the lectures and completed the post-test questionnaire. "Philosophy of palliative care" improved from 2.41 +/- 1.00 to 3.01 +/- 1.04 (full mark: 4). "Psychosocial & spiritual aspect of palliative care" improved from 1.04+/-0.83 to 1.89+/-0.86 (full mark: 3). "Pain and symptom management" improved from 7.02+/-1.97 to 9.81+/-2.14 (full mark: 13). The total score improved from 10.47+/-2.79 to 14.69+/-2.95 (full mark: 20). All scores improved significantly statistically with p value less than 0.05. In conclusion, this study highlights the knowledge gaps among nurses. The intervention significantly improved nurses' PC knowledge. Continuing education had a positive effect on nurses' knowledge and increased their awareness of palliative care.

Aging in Place – the Future Trend of Elderly Policy in Hong Kong

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Abstract

Aging population has become a global phenomenon. With the advanced health services being available, life expectancy also increases and the alarming issue of aging population is expected to continue in the coming 40 years. Recently, aging in place, which refers to having elderly care in the community, has been more common in Hong Kong. It supports the well-being of the elderly and enhances their quality of life. In order to relieve the problems generated by the aging population, there should be a better elderly policy, which meets the present and future needs of Hong Kong so as to support the development of an age-friendly society. This study aims to evaluate the effectiveness of the elderly policy in Hong Kong, to illustrate the challenges faced in the elderly service industry as well as to make some recommendations to the elderly policy in Hong Kong. Currently, there is a lack of initiatives for the development of elderly service industry in Hong Kong, associated with limited community elderly services in the private sectors. Moreover, the situation is not helped by an unfavorable elderly policy for aging in place. All these obstruct the introduction, development and promotion of aging in place in Hong Kong. To maximize the effectiveness, a wide-range and all-rounded elderly policy should be focused, and supported by the multi-disciplinary collaboration of the social welfare sector, non-government organizations in the elderly industry and the society. By providing more initiatives to the elderly and different parties in the society, aging in place can be promoted and achieved so as to develop a more suitable local policy for the elderlies in Hong Kong.

Sexual Health Promotion on Contraception among Hong Kong Teenagers

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Abstract

Hong Kong teenagers are becoming more open-minded towards sex due to cultural integration. However, current sex education and promotion, especially for contraceptive methods, are not well-promoted and effective in Hong Kong. This study aims to analyze teenagers' contraceptive behaviour, evaluate current sexual health promotion and provide recommendations for further improvement. There are many barriers lead teenagers not to use contraceptive during sexual intercourse including their attitude and knowledge towards sex and sexual transmitted diseases (STDs), the inconvenience and embarrassment of buying contraceptives and their pursuit of better sexual feeling. At present, Hong Kong government and some organizations provide information about STDs and means to practice safe sex through websites, public activities and mass media. Schools also adopt a P.A.T.H.S. program to supply sex education to students on the basis of Hong Kong policies. Most of the promotion and education contain some limitations, like providing conservative education, which should be improved for implementing better promotion in the future. In conclusion, detailed and strengthened sexual education and promotion is important to the next generation. In order to improve the current sex education and promotion, Hong Kong government and relative departments should develop a comprehensive sex education curriculum and apply more fascinating methods for education to capture teens' attention. Parents also play a pivotal role in educating their children and instilling them a right attitude towards sex.

Universal Health Care in Hong Kong: Lessons from Taiwan and Singapore

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Abstract

Hong Kong citizens enjoy a high quality of health care service. However, it mainly relies on government subsidy through public health services, particularly in hospital utilisation. After years of healthcare reform process, a new government-regulated voluntary health insurance scheme (VHIS) has been proposed for public consultation. There are rooms for improvement in the proposed health care insurance scheme. Hong Kong is facing a large ageing population with expected increases in the expenditure on health care. However, the proposed health care insurance scheme cannot satisfy the existing situation. Worse still, the public concerns about the proposed health care insurance because of uncertainties. In the neighbouring Taiwan and Singapore, innovative and practical healthcare financing systems have been working well for their communities. They are good examples for Hong Kong to study. For Taiwan, the insurance reduces the burden for citizens in contributing to the insurance. It enhances medical care choice, freedom and convenience, with a wealth redistribution. In Singapore, it is a low cost basic medical insurance scheme. It helps patients to cope with large bills through the 3M medical savings accounts. At the same time, it operates with co-payment features, such as the co-insurance, in which patients share part of the responsibility for their medical expenses. A new department is recommended to manage the new insurance scheme to make the health care system sustainable within an ageing population. It will launch the tripartite contributions by the government, employees and employers and will standardize the consultation fees, particularly of the private services. Furthermore, it will help to encourage and enhance the co-operation between public and private sectors in order to maximise the utilization of limited resources. Last but not least, everyone should have the same right to use the health care service and protection, in achieving universal health care for all residents. It is hoped that the health care insurance scheme in Hong Kong will be more effective and efficient, and reduce the burden of current situation. VHIS will be a tool to increase the fairness and quality of both public and private health services, while upholding the long-time principle that no one is denied adequate medical treatment due to lack of means. More importantly, Hong Kong citizens should not only rely on the Government to provide all the health care protection or investment. Nonetheless, people need to bear some of the responsibility because health is essentially a personal affair.

An Analysis of the Use of Vitamin Supplements among College Students in Hong Kong

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Abstract

This paper aims to investigate the status of vitamin supplements consumption among Hong Kong college students, and to identify potential factors that might affect their consumption. This is a cross-sectional study and data were collected from self-administered questionnaires. A total of 650 full-time college students was randomly selected and sampled among different Hong Kong tertiary institutions. The data collected from the survey were entered into the Statistical Product and Service Solutions (SPSS) programme for performing further statistical analysis. A majority of participants (79.8%) did not have a habit of taking vitamin supplements on a regular basis. 76.1%, 88.4% and 96.0% of the participants believed that *cost*, *brand* or *advertisement* did not play a role in determining their habits of vitamin supplements consumption respectively. While 68.8% believed that health concerns was the main driving factor that would encourage them to take vitamin supplements. Interestingly, about three quarters of the participants (73.2%) were not able to identify the two main categories of vitamins, while only 16.7% of the participants had answered the question correctly. Consumption of vitamin supplements among Hong Kong college students was not as common when compared to other overseas countries such as US and UK. It is suggested that further health education and promotion can be targeted to students in business disciplines who may lack appropriate health knowledge on vitamin supplements consumption.

Stay away from "Four-hypers" – Let's Start with Exercise and Healthy Diet!

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Abstract

In Hong Kong, heart diseases and cerebrovascular diseases are the third and fourth causes of death in 2014 respectively. The "four-hypers" are the main risk factors of cardiovascular diseases, including hypertension, hyperglycemia, hyperlipidemia and high body mass index (BMI). This study aims to examine how health campaigns can be designed in order to enhance people's awareness of the "four-hypers" and to change their health behaviours. Transtheoretical Model (TTM) is applied for primary, secondary and tertiary prevention of the "four-hypers" by progressing from an earlier stage to a later stage (i.e. pre-contemplation, contemplation, preparation, action and maintenance). The target population is people aged above 50. The design of health campaign is focused on transition from pre-contemplation to contemplation stage and from action to maintenance stage. To move from pre-contemplation to contemplation stage, leaflets, booklets and exhibition boards, educational talk, and health screening can be applied to increase public awareness. Whereas to proceed from action to maintenance stage, face-to-face and/or telephone counseling and educational talks for the public are recommended for modifying and maintaining healthy lifestyle. Early prevention and treatment of the "four-hypers" can substantially reduce the incidence and prevalence of cardiovascular diseases. Since modification of personal lifestyle is the key to achieve health and it needs a long period to be established, health promotion for the prevention of the "four-hypers" should be given more efforts, with continuity and perseverance, so as to spread out key and important health messages and to provide enough opportunities for the public to get involved in the health campaigns.

Unhealthy Nutrition and Lifestyle Habits: How They Affect Our Health in Short Term and Long Term

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Abstract

The study has reviewed the importance and consequences of unhealthy eating habits in our society and suggested ways to change to health behaviours. Unhealthy eating habits include features and behaviors such as (i) skipping breakfast as people in the modern societies may not have enough time for breakfast in the morning; (ii) an irregular eating pattern amongst people who have to work; (iii) eating while doing something else; and (iv) eating junk food that contains inadequate vegetables and other nutrients. There are both internal and external factors contributing to poor eating habits. Personal willingness is one of the internal factors, such as eating junk food. External factors include social and environmental factors. In addition, peer influence would affect people's decision on eating. Working adults often skip meals and choose the nutritionally deficient snacks and junk food because of their tight working schedule. There are short-term and long-term effects. Indigestion and heartburns are short-term effects. There are uncomfortable sensations in the upper abdomen during or after the eating. There may be burning or pain near the heart area. Weight gain would increase the risk of obesity, diabetes and coronary heart disease over a long time. Hence, obesity, diabetes and coronary heart disease are the long-term effects of unhealthy eating habit. Moreover, diabetes can lead to eye problem and kidney problem. There are social effects, leading to unhealthy self-image and social avoidance. Choice of food is a personal decision. It has been observed that nutrition and lifestyle behavior play a critical role in determining one's health status. A good management approach is important for everyone to deal with the utilization of time in sorting our problems and issues related to daily living. Behavioural changes are of significance if one wants to pursue a healthy life, but the modification cannot succeed immediately without perseverance and persistence. Nonetheless, healthy choices should be developed during early life stages if one wants to pursue a healthy life. Proper health promotion and education should be carried out both in the schools and to the general public in order to increase awareness of people in the community adopting a healthy nutrition and lifestyle habit.

Health Care Service and Population Aging in Hong Kong

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Abstract
Population aging in Hong Kong has become a widely discussed topic. Starting from 2014, the proportion of the population aged 65 years and above is predicted to increase dramatically from 15% to 36% in 2064. Hence, both the quality and quantity of the health care services for the local elderlies will be a major concern. Compared to the other age groups, elderlies tend to have greater need for public health care services, especially for those who are living alone, in lower socioeconomic status and having lower educational level. This paper is mainly focused on whether the current supply of health care services can meet the increasing demand in the future. The research has analyzed the statistical data from the Hong Kong Census Statistics Department and the provision of health care and hospital services for elderly in different districts in Hong Kong. Inequality on the health services distribution among districts is found. The Kwun Tong district, with the highest aging population, is observed to have comparatively insufficient health service support, but a higher utilisation of hospital beds among elderlies. Moreover, the provision ratio of doctors for elderly patients is found to be lower in Hong Kong, as compared to New York and London. The findings reflect that insufficient resources are being provided to fulfill the increasing demand of health care services and hospital services in Hong Kong. If the government maintains the current resource allocation among the different districts, the uneven distribution of health care services will be aggravated, eventually resulting in the increase of health expenditure in the future.

Primary Health Education in the Community Provided by Students of Health Studies: Stress Urinary Incontinence Care among Female in Hong Kong

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Abstract

This paper examines the impacts of urinary incontinence in the community with respect to the quality of life and psychosocial consequences, and the management from a public health perspective. Urinary incontinence is prevalent in women and has negative impacts on the social and emotional aspects in the quality-of-life (QOL). It has been reported that 52% of female in Hong Kong have urinary incontinence (UI), which is more commonly found in female of age 50 years or above. Elderly women are more likely to suffer from stress urinary incontinence (SUI). The prevalence of SUI has a steady rise in Hong Kong and female with SUI often experience impaired QOL. Moreover, SUI is often associated with depressive mood that correlates with the severity of the urinary symptoms. Around 90% of female respondents with SUI in a study have impairments in engaging social activities, and in maintaining emotional stability. This further implies that urinary incontinence has a significant impact on the QOL that determines whether a patient will seek medical consultation or not. However, women with SUI often tolerate the symptoms and do not seek medical help. Evidence has shown that Kegal exercise in daily life has improved the symptoms of SUI by strengthening the pelvic floor muscles. The current problems of SUI in women are the delay in seeking medical consultation and the tolerance of SUI inconvenience by using pads for absorption of urinary leakage as well as a lack of sustained practice of pelvic floor exercise. It is a challenge to raise the awareness of SUI care in this population. In this context, students of health studies are encouraged to get involved in primary healthcare promotion by out-reaching to women who tolerate SUI, with the objectives to raise the awareness of SUI and to promote practice of Kegal exercise among these women in the community.

Regular Physical Exercise and Risks of Heart Disease

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Abstract

Heart diseases have been the third leading cause of death in Hong Kong since 1960s and coronary heart diseases (CHD) is the major cause of death among them. There were about eleven persons on average died from CHD each day in 2013. Physical inactivity and overweight are the major risk factors shown in many previous studies, which have suggested that increasing the minimum recommended levels of physical activity by duration and frequency can lower the risk of developing heart failure by 20 to 35 percent. However, majority of Hong Kong Chinese are not physically active enough. This study has examined how risk of coronary heart diseases can be reduced by optimal physical exercise, the optimal duration, frequency and type of exercise. Regular physical exercise can decrease the chance of having a cardiac event, and reduce the possibility of needing a coronary revascularization procedure. Physical exercise can promote weight reduction and reduce blood pressure as it can lower the levels of "bad" cholesterol levels as well as total cholesterol in the blood. Body mass index is also correlated positively with systolic blood pressure. Moreover, moderate physical exercises can increase insulin sensitivity so as to reduce the risk of vascular injury, particularly in diabetes. On the other hand, aerobic exercises can improve the peak oxygen consumption, endothelial function and left ventricular ejection fraction and serum levels of proinflammatory cytokines. However, there is no clear consensus on the optimal duration, frequency and type of exercise in prevention of coronary artery disease. The recommended physical activities include regular walking, cycling, dancing, swimming and stair-climbing. The intensity and duration of physical exercises should be attained at an optimal level regarding to the age and the physical health conditions of individuals. The appropriate strength of physical exercise is reached when a feeling of "out of breath" is sensed. Controlling cardiac risk factors by promoting physical activity in coronary heart disease patients, by patient education and in self-help groups, has been shown to be effective in reducing the progress of the disease.

Conference Workshop

The Continuum of Care – How Yee Hong serves the changing needs of the Chinese seniors in Canada

12 January 2016, Tuesday, 10:30 am to 12:30 pm

Professor K.T. Tsang, Factor-Inwentash Chair in Social Work in the Global Community, University of Toronto (http://socialwork.utoronto.ca/profiles/a-ka-tat-tsang/), Principle Investigator of the 2012 Needs Study, will discuss changing needs from these perspectives:

i. *Changing circumstances,*
ii. *Transition in life, and*
iii. *Interaction with service system.*

K.Y. Liu, Executive Director – Social Services at Yee Hong, will discuss the continuum of care.

> *Viewing needs from a Transition in Life perspective, Yee Hong established a continuum of care model to provide services to the community when people first approach aging, when they are still very active, through the process of aging to serve them when they require more care until a time when they have to enter a nursing home. The purpose of the continuum of care is to keep seniors aging at home to avoid early institutionalization.*

Maria Chu, Director of Community services, will share the new initiatives such as Sexuality and Intimacy Project, Play Intervention and e-learning for caregivers.

> *Through the past 20 years in providing service and care to seniors, Yee Hong's service model and philosophy has changed. We moved from a physical care/medical model to an empowerment model to fulfill our vision to enable seniors to live their lives to the fullest.*



Awards for Outstanding Student Papers in Health Studies

1	***Aging in Place – the Future Trend of Elderly Policy in Hong Kong*** Elaine Y.T. Kwok	Onward Community Healthcare award
2	***Universal Health Care in Hong Kong: Lessons from Taiwan and Singapore*** Man Hin Kan, Ho Sze Ho, Ho Leung, John Wong, Cho Wing Mok	Pfizer Hong Kong Award
3	***Promoting Electronic Health Record (eHR) Sharing System in Hong Kong – What Can We Learn from Taiwan*** Wing Yan Cheung, Sze Wing Ho, Ka Man Leung, Wang Chi Tse, Wing Tan Tsim, Chun Siu Yick, San Ni Yu	Pfizer Hong Kong Award
4	***Stay Away from "Four-Hypers" – Let's Start with Exercise and Healthy Diet!*** Tina M. Y. Wong	Pro-Cardio Award
5	***An Investigation of Fruits and Vegetables Consumption Among University Students in Hong Kong*** P. C. Cheng, Jessica Y. T. Tang	Human Health Award
6	***Health Information Searching Behavior among College Students in Hong Kong: An Exploratory Study*** Percy W.T. Ho, Tina M.Y. Wong, Elaine Y. T. Kwok and Peter C. S. Au	Human Health Award
7	***An Analysis of The Use of Vitamin Supplements among College Students in Hong Kong*** Leon W. Li , Osais G. Hui and Wing Wong	Human Health Award

Acknowledgement

The Conference Chair wishes to thank Members of the Organising Committee and the Academic Discipline of Health and Life Sciences for making all of the arrangements for the CPCE Health Conference 2016, and to thank the Conference Advisors, colleagues and students of HKCC, SPEED, CPCE and The University, Associate Organisations and Supporting Organisations for the great support to this important event.

We are honoured to have the blessings of the Under Secretary for Food and Health, Professor Sophia Chan, and the President of our University, Professor Timothy Tong, to officiate the opening. Moreover, the presence of Sir James Mirrlees and Professor Kenneth Lee as keynote speakers at the Conference has granted the programme a great learning opportunity for our students, academic colleagues, as well as 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 our aging society and health care services, particularly in long term care.

Efforts and time in the editing and production of this *Programme Book*, contributed by Dr Ken Peng, Dr Vincent Law, Dr Ben Fong, Dr Artie Ng, Dr Simon Cheung, and our students, Elaine Kwok and Percy Ho, have made this publication a valuable e-journal for reference to academic and professional colleagues and students in the years to come.

We wish to thank all contributors and 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 and good health!

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Appendix: Posters

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

Application of Health Belief Model in Cardiovascular Diseases

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❖ Objective:

To examine why people will start to prevent and detect Cardiovascular Disease (CVD).

❖ Findings:

Perceived Severity: It is detrimental that the symptoms of CVD can cause physical discomfort, change in family structure, and negative emotions and depression.

Perceived Susceptibility: The non-modifiable and modifiable risk factors raise the public awareness of their lifestyles and the risk of getting CVD.

Perceived Benefits: Adoption of healthier behaviour can extend life expectancy, speed up the process of recovery by secondary prevention, reduce the expenses and strengthen the relationship with family and friends.

Perceived Barriers: The obstacles of adopting a preventive behaviour could be related to the socio-environmental factors, peer pressure, moodiness and stress, side effects of medicines and forget to take pills.

Cues to action: Family members, friends, support group and mass media are influential to an individual motivation of behavioural change.



❖ Conclusion and Recommendations:

Individuals will only engage in behavioural change when they perceive the threat of CVD, when the perceived benefits outweigh the perceived barriers, and when there are cues to action. It is suggested that health professionals should organize more health education programmes or campaigns and provide risk assessments so that the public can understand the threat of CVD and are motivated to adopt a healthier behaviour.





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Application of Theory of Reasoned Action (TRA) in Prediction of Smoking Cessation

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Background

Smoking is a common and significant public health concern because it is one of the major risk factors in chronic diseases. Based on the adverse effects brought by smoking, the Hong Kong government have narrowed the smoking restriction and increased the cigarette tax in order to reduce the number of tobacco users. However, there are still some rooms for lowering the number.

Objective

To study the application of TRA in the change of health behaviour with the aim to predict the usefulness in smoking cessation.

Clinical Application of TRA

TRA is an intrapersonal health behaviour theory that is widely used to predict behaviour intention. Attitudes, subjective norms and perceived behavior control are the three main ideas in the theory. Examples of application include condom usage intention, prediction intention and attendance at screening programmes, etc.

TRA in Prediction of Smoking Cessation

Different factors can affect smoking cessation with the application of TRA.

Attitudes: Illnesses, cost of cigarette, smoking rumors & stress
Subjective norms: Influence of the surroundings
Perceived behavior control: One's strength of belief and self-efficacy

Conclusion

Even though the government have done lots of works, the plan of action is not comprehensive enough. The effectiveness still needs to improve. It is recommended to increase tobacco user intention on smoking cessation by increasing the motivation towards cessation, providing family and social supports, and setting up self-efficacy training centers.

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Review of Colorectal Cancer in Hong Kong Using the Study in South Korea

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Objective: To promote the importance of colorectal cancer to Hong Kong citizens by identifying their reasons of not to screen for this cancer; to provide strategies on the levels of prevention; and to make recommendations to those stakeholders in colorectal cancer health promotion.

Design: Review study on situation in Hong Kong using the study in South Korea.

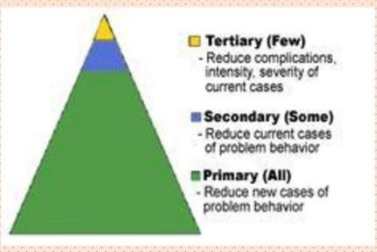
Methodology: By first reviewing the situation of colorectal cancer in Hong Kong, and its risk factors and obvious symptoms. Then using the study in South Korea to find out the reasons why people do not go for screening.

Results: The Korean study reflects a condition of not to screen being due to the low self-efficacy to behaviour maintenance (α=0.54) and the few stimulus to act on the behaviour (α=0.70).

Discussion:

Top 10 cancers for both sexes in 2012	Deaths	%
1 Lung	3,893	29.2
2 Colorectum	1,903	14.3
3 Liver	1,505	11.3
4 Stomach	657	4.9
5 Breast	604	4.5
6 Pancreas	538	4
7 Prostate	362	2.7
8 Non-Hodgkin lymphoma	351	2.6
9 Nasopharynx	329	2.5
10 Oesophagus	313	2.3





Conclusion: Colorectal cancer can be prevented through primary, secondary, and tertiary prevention. The Hong Kong government, local community centers, together with the distinct councilors, mass media, health professionals, family, and friends have roles on colorectal cancer health promotion in Hong Kong.

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COLLEGE OF PROFESSIONAL AND CONTINUING EDUCATION 專業及持續教育學院

Promoting Electronic Health Record (eHR) Sharing System in Hong Kong – What can we learn from Taiwan

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Objective

To understand the reasons and advantages of promoting Electronic Health Record (eHR) Sharing System in Hong Kong and to review what can Hong Kong learn from the Taiwan's experience.

Evaluation

EHR sharing system brings about a host of benefits to the community - more efficient health care services; reducing on medical costs; enhancing the availability and transparency of information through sharing of patient records between healthcare providers in both the public and private sectors; reducing the frequency of consultations; and improving the accuracy of diagnosis and patient management.

Electronic medical record system in Taiwan

Being holistic and strategic, and characterised by standards, legislation, safety and promotion.

Current situation in Hong Kong

Hospital Authority has initiated a few pilot projects since 2006 in order to facilitate better collaboration on sharing of electronic records between the public and private sectors.

Legislation on eHR

Top priority because it is essential and fundamental to protect the privacy of patients' information and to avoid corruption of concerned stakeholders.

Social marketing and promotion

Comprehensive promotion strategies will increase the popularization rate of eHR in Hong Kong, and is vital for its success.

Recommendation

Hong Kong could copy the practice of subsidies and professional training courses offered to Taiwan hospitals to enhance the development of EMR, and to provide a practical framework. The Audit commission has recommended a strategy for stepping up publicity of electronic patient records.

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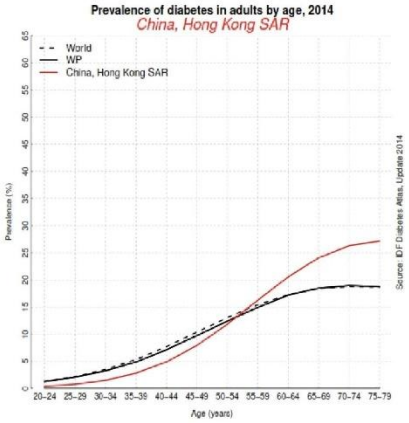
電子健康紀錄互通系統
Electronic Health Record Sharing System

衛生福利部
電子病歷推動專區

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Prevention of Diabetes: a Strategic Framework for Hong Kong

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Diabetes is becoming more common and it affects about 10% of the local community. As a public health concern, it is important to reduce the incidence of diabetes, and to keep citizens healthy and free from disease.

Objective: To raise public awareness of diabetes, to promote a "Healthy City", and to enhance the knowledge related to obesity prevention among children and adolescents.

Design: This paper is based on a number of public health concepts such as Health Promotion Planning Cycle, primary prevention and Social Cognitive Theory, with reference to the WHO and relevant experience of other countries in the prevention of diabetes.

Setting: In order to achieve the objectives, a strategic framework is required. Primary care is the first point of contact in a health care system, and the majority of people can enjoy the services. This strategic framework is a primary prevention. The following priority areas have been given focused attention: (i) promote new and strengthen existing health promotion on diabetes; (ii) encourage primary school-based health promotion program; (iii) strengthen engagement of all stakeholders; (iv) with the use of information and tools to improve public health and health knowledge level. This strategic framework is built for the citizens' health in Hong Kong and the key elements for implementation include supportive environment, partnership of different stakeholders and empowerment with public education.

Conclusion: Focusing on the primary healthcare is the most effective way to lower the prevalence of diabetes, and other common non-communicable diseases. It is expected that the successful implementation of the strategy framework will help Hong Kong to establish a sustainable health care system, so that citizens in Hong Kong will maintain a high level of health awareness and be able to make healthier choices. It is time to work together against non-communicable diseases and make Hong Kong a healthy city.

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Health Information Searching Behavior among College Students in Hong Kong: An Exploratory Study

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Research Objective

The study aims to investigate the current utilization of health information for disease prevention and health promotion among college students in Hong Kong, to understand how they acquire health information through different electronic media and to what extent they trust these health information.

Methodology

A cross-sectional study was performed between October and November 2015, 821 questionnaires were distributed to college students randomly selected from different tertiary institutions in Hong Kong, data were collected and then analyzed through SPSS programme.

Results

The findings showed that the respondents were most likely to look for health information when they were feeling sick (50.4%). Both male (63.5%) and female (64%) respondents reported that they lacked appropriate health knowledge while it was important for them to obtain this kind of information. A majority of respondents used the internet (85.4%) and social media (67%) as their main sources of health information. There were 60% of respondents who demonstrated doubts towards the reliability of information from the internet (23.3%) and social media (32.9%). Contrary to other similar overseas research, there was no significant gender difference in terms of how these health information were obtained.

Conclusion

Based on the results, it was observed that internet and social media were the principle sources of health information for college students in Hong Kong. However, most of them were unsure about the validity and trustworthiness of these information.

Recommendation

To enhance students' awareness in obtaining reliable health information through the internet or from social media platforms, it was recommended that more health promotion should be carried out among local tertiary institutions to improve students' ability to evaluate the validity of these information.

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Preventive Strategies for Intimate Partner Violence – a Hong Kong Perspective

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Research Objective

This paper aims to provide preventive strategies for Intimate Partner Violence (IPV) in Hong Kong by using public health model suggested by the Centers for Disease Control and Prevention, and the transtheoretical model, a model of intentional change, is employed as a framework for planning the strategies.

Discussion

An IPV prevention program are designed to implement in Hong Kong. The program aims to reduce sexual and physical IPV by raising awareness on women's rights, increasing the number of IPV-related services into the healthcare sector, as well as increasing the awareness on the community of the impact of IPV. The program will last for 2 years, and will be implemented in secondary schools and community centers in 18 districts in Hong Kong.

Steps	Actions
1. Define the problem	Understand the magnitude of the problem, i.e. who, what, when, where and how, associate with IPV
2. Identify Risk and Protective Factors	Identify the protective and risk factors on all levels of social ecological factors
3. Develop and Test Prevention Strategies	Use an evidence-based approach for program planning
4. Assuring widespread adoption	Evaluate the effectiveness of the program

Table 1: The four steps public health approach applied in the IPV prevention program



Fig 1: Timeline of the stage of changes of IPV prevention strategies and interventions

Conclusion

Although Hong Kong has enacted legal policies to protect the IPV victims from abuser, provided many services for supporting the victims, e.g. Victims Support Program for Victims of Family Violence, Refuge Centers for Women, Multi-purpose Crisis Intervention and Support Center, as well as Family Crisis Support Center and implemented psycho-educational programs for reducing the risk of the reoccurrence of the violence, the measures adopted in preventing IPV are not significance. The IPV prevention strategies suggested in this paper used the transtheorectical Model as a framework to change the general public's attitude and perception on IPV step by step, in order to effectively maintain a respectful relationships and to adequately prevent violence within the school and the general community. .

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The Effect of Clavicle Support on Myoelectric Activity of Axioscapular Muscles in Young Women with Chronic Neck and Shoulder Pain during Computer Typing

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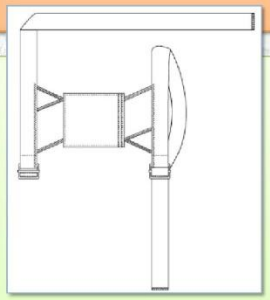
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◆ Objective:

1. To study the immediate changes in the myoelectric activity of the axisoscapular muscles when a clavicle support is worn
2. To evaluate the potential effectiveness of clavicle support in the treatment of work-related neck and shoulder pain

◆ Methodology:

In this study, a total of 5 females between 20 and 30 years of age (mean: 21.2; SD: 0.8) with more than 3 months of neck and shoulder discomfort were recruited. A scientific evaluation of the myoelectric activity of axioscapular group of muscles, namely, the anterior deltoid (AD), upper trapezius (UT), middle trapezius (MT), and lower trapezius (LT) were conducted by using surface electromyography (sEMG). The subjects were instructed to type a simple story for 30 minutes with and without the use of the clavicle support strap respectively.





◆ Results:

In the pairwise comparison between the use and absence of clavicle support (t-test), some significant differences between the use and absence of clavicle support were found on the MT (t=-2.791, p=0.021) and UT (t=-3.011, p=0.05) muscles. Results revealed that wearing clavicle support leads to significant increase of activity on muscles UT and MT.

The findings can serve at the very least to improve our understanding of clavicle support in association with axioscapular muscle activity in young women. This provides the basis for the design and development of suitable intervention devices in the workplace for the reduction of musculoskeletal disorders.

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STUDY OF MEDICAL NURSES' KNOWLEDGE ABOUT PALLIATIVE CARE AND THE EFFECT OF EDUCATIONAL INTERVENTION

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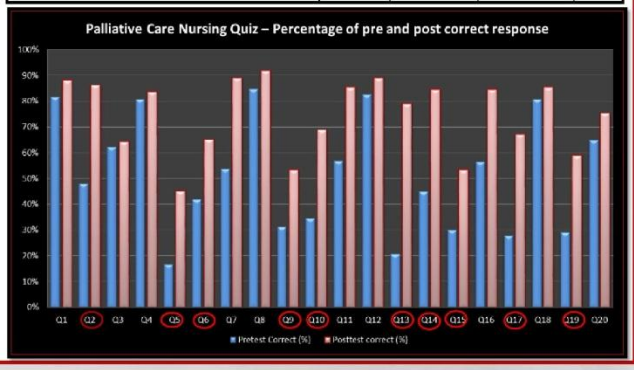
- **OBJECTIVES:** To assess nurses' palliative care knowledge and to evaluate the influence of educational intervention
- **DESIGN**: Quasi-experimental pretest-posttest study
- **SETTING**: Department of Medicine & Geriatrics in Caritas Medical Centre
- **PARTICIPANTS**: All medical nurses were invited to participate in the study. The data were collected between 1st to 11th august 2015. The intervention consisted of two identical 90 minutes case-based lecture on 12th august 2015. Before and immediately after the intervention, the participating nurses were anonymously assessed by filling up a validated 20 items palliative care nursing quiz (PCNQ). Descriptive statistics and t-test were applied to compare the differences in knowledge before and after the intervention
- **RESULTS**: More than 80% of nurses returned the baseline PCNQ (227 out of 280). Around 70% were registered nurse (n=158) and more than half (n=123) had more than 10 years professional experience. Among the respondents, 109 nurses (48.0%) attended the lectures and completed the post-test questionnaire. The percentage of correct response in the three domains were showed in table 1. The scores were listed in table 2. The intervention significantly improved nurses' PC knowledge

TABLE 1. DOMAINS & PERCENTAGE OF CORRECT RESPONSE

	Philosophy of palliative care		
Q1	Palliaitve care is appropariate only in situations where there is evidence of deterioration in patient's cond	185(81.5%)	96(88.1%)
Q9	**The provision of palliaitve care requires emotional detachment for health care providers**	**71(31.3%)**	**58(53.2%)**
Q12	The delivery of palliative care complements medical treatment	187(82.4%)	97(89%)
Q17	**The high no. of dealths in palliaitve care units inevitably results in burnout in health care professionals**	**63(27.8%)**	**73(67%)**
	Psychosocial & spiritual aspects of palliative care		
Q5	**It is crucial for family members to remaina at the bedside unitil death occurs**	**38(16.7%)**	**49(45%)**
Q11	Men generally reconcile their grief more quickly than women	129(56.8%)	93(85.3%)
Q19	**It is easier to accept the loss of one who is distant than one who is beloved**	**66(29.1%)**	**64(58.7%)**
	Pain and symptom management		
Q2	**Morphine is the standard opioid used to compare the analgesic effect of other opioids**	**109(48%)**	**94(86.2%)**
Q3	The extent of the disease determines the degree of pain management	141(62.1%)	70(64.2%)
Q4	Adjuvant therapies(drugs that are not actually analgesics) are important in managing pain	183(80.6%)	91(83.5%)
Q6	**During the last days of life, the drowsiness secondary to the imbalance in blood potassium,sodium and chloride values may decrease the need for sedation**	**95(41.9%)**	**71(65.1%)**
Q7	Drug addiction is a major problem when morphiine is used on a long term basis for pain management	122(53.7%)	97 (89%)
Q8	Individuals who are taking opioids should also follow a bowel regimen	192(84.6%)	100(91.7%)
Q10	**During the terminal phase of an illness, drugs that cause difficulty in breathing are appropriate for the treatment of severe breathlessness**	**78(34.4%)**	**75(68.8%)**
Q13	**The use of placebo(inactive drug or preparation) is appropriate in the treatment of some types of cancer pain**	**47(20.7%)**	**86(78.9%)**
Q14	**In high doses, codeine causes more nausea/vomiting than morphine**	**102(44.9%)**	**92(84.4%)**
Q15	**Suffering is the same as physical pain**	**68(30%)**	**58(53.2%)**
Q16	Pethidine is not an effective analgesic in control of chronic pain	128(56.4%)	92(84.4%)
Q18	Clinical signs & symptos of chronic pain are different from those of acute pain	183(80.6%)	93(85.3%)
Q20	The pain threhold is lower by anxiety or gatigue(i.e. more likely to feel pain)	147(64.8%)	82(75.2%)

TABLE 2.

	Full mark	Pre-test score	Post-test score	*p*-value
Domain 1: Phill sophy of palliative care	4	2.41 +/- 1.00	3.01 +/- 1.04	0.01
Domain 2: Psychosocial & spiritual aspect of palliative care	3	1.04+/-0.83	1.89+/-0.86	0.00
Domain 3: Pain and symptom management	13	7.02+/-1.97	9.81+/-2.14	0.00
Total score	20	10.47+/-2.79	14.69+/-2.95	0.00



CONCLUSIONS:

This study highlights the knowledge gaps among nurses. Continuing education had a positive effect on nurses' knowledge and increased their awareness of palliative care

Acknowledgement

We would like to thank Professor Frances Fothergill Bourbonnais and her team for granting us permission to use the PCNQ.

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Aging in Place – the Future Trend of Elderly Policy in Hong Kong

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Aging population has become a global phenomenon. With the advanced health services being available, life expectancy also increases and the alarming issue of aging population is expected to continue in the coming 40 years. Recently, aging in place, which refers to having elderly care in the community, has been more common in Hong Kong. It supports the well-being of the elderly and enhances their quality of life. In order to relieve the problems generated by the aging population, there should be a better elderly policy, which meets the present and future needs of Hong Kong so as to support the development of an age-friendly society.



Research objectives

This study aims to evaluate the effectiveness of the elderly policy in Hong Kong, to illustrate the challenges faced in the elderly service industry as well as to make some recommendations to the elderly policy in Hong Kong.

Discussion

Currently, there is a lack of initiatives for the development of elderly service industry in Hong Kong, associated with limited community elderly services in the private sectors. Moreover, the situation is not helped by an unfavorable elderly policy for aging in place. All these obstruct the introduction, development and promotion of aging in place in Hong Kong.



Conclusion

To maximize the effectiveness, a wide-range and all-rounded elderly policy should be focused, and supported by the multi-disciplinary collaboration of the social welfare sector, non-government organizations in the elderly industry and the society. By providing more initiatives to the elderly and different parties in the society, aging in place can be promoted and achieved so as to develop a more suitable local policy for the elderlies in Hong Kong.

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Sexual Health Promotion on Contraception among Hong Kong Teenagers

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Background: Hong Kong teenagers are becoming more open-minded towards sex due to cultural integration. However, current sex education and promotion, especially for contraceptive methods, are not well-promoted nor effective in Hong Kong.

Objective: To analyze teenagers' contraceptive behavior, to evaluate current sexual health promotion, and to provide recommendations for further improvement.

Findings: Many barriers lead teenagers not to use contraceptive during sexual intercourse, including their attitude,and knowledge towards sex and sexual transmitted diseases (STDs), the inconvenience and embarrassment of buying contraceptives, and their pursuit of better sexual feeling. At present, the Hong Kong government and some organizations provide information about STDs and the means to practice safe sex through websites, public activities and mass media. Schools also adopt a P.A.T.H.S. program to supply sex education to students on the basis of Hong Kong policies. Most of the promotion and education contain some limitations, like providing conservative education, which should be improved for implementing better promotion in the future.

Conclusions: Detailed and strengthened sexual education and promotion is important to the next generation. To improve current sex education and promotion, Hong Kong government and relative departments should develop a comprehensive sex education curriculum and apply more fascinating methods for education to capture the teens' attention. Parents also play a pivotal role in educating their children and instilling them a right attitude towards sex.

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Universal Health Care in Hong Kong: Lessons from Taiwan and Singapore



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Objectives: To look for improvement in the proposed health care insurance scheme and to learn from the experience in Taiwan and Singapore.

Findings: Hong Kong is facing a large ageing population with expected increases in the expenditure on health care. However, the proposed health care insurance cannot satisfy the existing situation. Worse still, the public concerns about the proposed health care insurance because of the uncertainties. In the neighbouring Taiwan and Singapore, innovative and practical healthcare financing systems have been shown to be working well for their communities. They are good examples for Hong Kong to study. They enhance the medical care choices, freedom and convenience, with a wealth redistribution. In Singapore, it is a low cost basic medical insurance scheme. It helps patients to cope with large bills through the 3M medical savings accounts. At the same time, it operates with co-payment features, such as the co-insurance, in which patients share part of the responsibility for their medical expenses.

Recommendations: A new department is recommended to manage the new insurance scheme in order to make the health care system sustainable within an ageing population. It will launch the tripartite contributions by the government, employees and employers and will standardize the consultation fees, particularly of the private services. Furthermore, it will help to encourage and enhance the co-operation between public and private sectors in order to maximise the utilization of limited resources. Last but not least, everyone should have the same right to use the health care service and protection, in achieving universal health care for all residents. It is hoped that the health care insurance scheme in Hong Kong will be more effective and efficient, and reduce the burden of current situation. The Voluntary Health Insurance Scheme (VHIS) will be a tool to increase the fairness and quality of both public and private health services, while upholding the long-time principle that no one is denied adequate medical treatment due to lack of means. More importantly, Hong Kong citizens should not only rely on the Government to provide all the health care protection or investment. Nonetheless, people need to bear some of the responsibility because health is essentially a personal affair.

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An analysis of the use of vitamin supplements among college students in Hong Kong

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Research Objective: To investigate vitamin supplements consumption status among college students in Hong Kong, and to identify potential factors that might affect their consumption.

Methodology: A cross-sectional study was performed between October and November 2015, 650 self-administered questionnaires were distributed to randomly selected full-time college students from different tertiary institutions, data were collected and analyzed through SPSS programme for statistical analysis.

Results: It was found that a majority of participants (79.8%) did not have a habit of taking vitamin supplements on a regular basis. 76.1%, 88.4% and 96.0% of the participants believed that *cost*, *brand* or *advertisement* did not play a role in determining their habits of vitamin supplements consumption respectively. While 68.8% of the participants reported that health concerns was the main driving factor that encouraged them to engage in consuming vitamin supplements. Interestingly, about three quarters of the participants (73.2%) were not able to identify the 2 main categories of vitamins, 10.2% of participants thought they knew but answered incorrectly, while only 16.7% of participants had answered the question correctly.

Recommendations: Consumption of vitamin supplements among Hong Kong college students were found to be not as common when compared to overseas countries such as US and UK. It was recommended that further health education could be targeted to college students who are lacking health knowledge on appropriate consumption of vitamin supplements.

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Stay away from "Four-hypers" – Let's Start With Exercise and Healthy Diet!



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Research Objective

In Hong Kong, heart diseases and cerebrovascular diseases are the third and fourth causes of death in 2014 respectively. The "four-hypers" are the main risk factors of cardiovascular diseases, including hypertension, hyperglycaemia, hyperlipidaemia and high body mass index (BMI). This study aims to examine how health campaigns can be designed in order to enhance people's awareness of the "four-hypers" and to change their health behaviours.

Interventions

Transtheoretical Model (TTM) is applied for primary, secondary and tertiary prevention of the "four-hypers" by progressing from an earlier stage to a later stage (i.e. pre-contemplation, contemplation, preparation, action and maintenance). The target population is people aged above 50. The design of health campaign is focused on transition from pre-contemplation to contemplation stage and from action to maintenance stage.

Increasing public awareness (from pre-contemplation to contemplation stage)	
Aim	**Recommended Events**
➢ People become intent to have a healthy diet and to do physical activity within the next 6 months	➢ Leaflets, booklets and exhibition boards ➢ Educational talk with role-playing session ➢ Health screening with consultation
Modifying and maintaining healthy lifestyle (from action to maintenance stage)	
Aims	**Recommended Events**
➢ People have continued healthy lifestyle for less than 6 months in action stage and for more than 6 months in maintenance stage ➢ Enhance people's self-efficacy	➢ Face-to-face and/or telephone counseling ➢ Self-help booklets ➢ Educational talk for public

Conclusion

Early prevention and treatment of the "four-hypers" can substantially reduce the incidence and prevalence of cardiovascular diseases. Since modification of personal lifestyle is the key to achieve health and it needs a long period to be established. Health promotion for the prevention of the "four-hypers" prevention should be given more efforts, with continuity and perseverance, so as to spread out key and important health messages and to provide enough opportunities for the public to get involved in the health campaigns.

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Unhealthy Nutrition and Lifestyle Habits: How they affect our health in short term and long term

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Objectives

To investigate some of the short term and long term effects on health arising from nutrition and lifestyle habits:

- Skipping breakfast
- Irregular eating patterns
- Eating while doing something
- Eating junk food



Factors and Causes

It has been suggested that factors including personal willingness to adopt a health lifestyle, peer pressure, family influences and employment status all appear to play significant roles in affecting people's nutrition and lifestyle habits. The working adults often skip meals and choose the nutritionally deficient snacks and junk food because of their tight working schedule. Habits formed at a young age are more likely to be carried into adulthood.

Potential Effects and Consequences

Short-term effects and consequences:

- Indigestion: uncomfortable sensations in the upper abdomen during or after food consumption.
- Heartburn: burning sensations or pain near the chest after food consumption.
- Weight gain: from over-nutrition or lack of exercise, increasing risks of suffering obesity, diabetes and coronary heart disease etc.

Long-term effects and consequences:

- Obesity: increasing risks of contracting type-2 diabetes and coronary heart disease.
- Type-2 diabetes: increasing risks of diabetic cataract and kidney diseases.
- Social effects: unhealthy self-image leading to social avoidance.

Recommendations

It has been observed that nutrition and lifestyle behavior play a critical role in determining one's health status. Healthy choices should be developed during early life stages if one wants to live a healthy life. Proper health promotion and education should be carried out both in the schools and to the general public in order to increase awareness of people in the community adopting a healthy nutrition and lifestyle habit.

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Health Care Service and Population Aging in Hong Kong

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Objective

To understand the provision of elderly health care services and to examine whether the current supply of health care services can meet the increasing demand brought by the aging population in the future.

Focus

Elderly health care service in different districts in Hong Kong.

Findings

The research has analyzed the statistical data from the Hong Kong Census Statistics Department and the provision of health care and hospital services for elderly in different districts in Hong Kong. Inequality in the health services distribution among districts is found. The Kwun Tong district, with the highest aging population, is observed to have comparatively insufficient health service support, but a higher utilisation of hospital beds among the elderlies. Moreover, the provision ratio of doctors for elderly patients is found to be lower in Hong Kong, as compared to New York and London.

Conclusion

The findings reflect that insufficient resources are being provided to fulfill the increasing demand of health care services and hospital services in Hong Kong. If the government maintains the current resource allocation among the different districts, the uneven distribution of health care services will be aggravated, eventually resulting in the increase of health expenditure in the future.

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Primary Health Education in the Community Provided by Students of Health Studies: Stress Urinary Incontinence Care Among Female In Hong Kong

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Objectives

To gather information and review the current trend of women with stress urinary incontinence in Hong Kong, and to promote practice of Kegal exercise among these women in the community.

Findings

52% of females in Hong Kong have reported urinary incontinence (UI). UI is commonly found in women of age 50 or above, whereas elderly women are more likely to suffer from stress urinary incontinence (SUI). The prevalence of SUI is rising steadily in Hong Kong. Female with SUI often experience impaired quality-of-life (QOL), impaired engagement in social activities and in maintaining emotional stability. SUI is often associated with depressive mood that correlates with the severity of the urinary symptoms. Evidence has shown that practicing Kegal exercise can improve the symptoms of SUI by strengthening the pelvic floor muscles. However, women with SUI often tolerate the problem by using pads for absorption of urinary leakage. They delay in seeking medical help and are lack of sustained practice of pelvic floor exercise.

Conclusion

The prevalence of stress urinary incontinence has a steady rise in Hong Kong. Female with stress urinary incontinence often experience impaired QOL. It is a challenge to raise the awareness of SUI care in this population.

Recommendation

Students of health studies have conducted a self-administered survey, namely ICIQ-UI, to examine current trend and the impacts of SUI. Females aged 16 or above in Hong Kong are invited for this survey. Questions of the impact of SUI to QOL are incorporated into the questionnaire. The participants are recruited by invitation of female friends and relatives in the community. Students of health studies will provide health education on stress urinary incontinence and invite respondents with SUI for practicing of Kegel exercise for 8 weeks. The same survey is administered pre- and post- practice of Kegal exercise in order to assess its effectiveness in relieving the symptoms and impacts to QOL.

Implication of the study

Health education of stress urinary incontinence can be promoted in non-clinical settings by students of health studies via outreach of health promotion in the community.

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Regular Physical Exercise and Risks of Heart Disease

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Introduction

Heart diseases have been the third leading cause of death in Hong Kong since 1960s and coronary heart diseases (CHD) is the major cause of death among them. There were about eleven persons on average died from CHD each day in 2013. Physical inactivity and overweight are the major risk factors shown in many previous studies, which have suggested that increasing the minimum recommended levels of physical activity by duration and frequency can lower the risk of developing heart failure by 20 to 35 percent. However, majority of Hong Kong Chinese are not physically active enough.

Objective

This study has examined how risk of coronary heart diseases can be reduced by optimal physical exercise, the optimal duration, frequency and type of exercise.

Discussion

Regular physical exercise can decrease the chance of having a cardiac event, and reduce the possibility of needing a coronary revascularization procedure. Physical exercise can promote weight reduction and reduce blood pressure as it can lower the levels of "bad" cholesterol levels as well as total cholesterol in the blood. Body mass index is also correlated positively with systolic blood pressure. Moreover, moderate physical exercises can increase insulin sensitivity so as to reduce the risk of vascular injury, particularly in diabetes. On the other hand, aerobic exercises can improve the peak oxygen consumption, endothelial function and left ventricular ejection fraction and serum levels of proinflammatory cytokines. However, there is no clear consensus on the optimal duration, frequency and type of exercise in prevention of coronary artery disease.

Conclusion and Recommendation

The recommended physical activities include regular walking, cycling, dancing, swimming and stair-climbing. The intensity and duration of physical exercises should be attained at an optimal level regarding to the age and the physical health conditions of individuals. The appropriate strength of physical exercise is reached when a feeling of "out of breath" is sensed. Controlling cardiac risk factors by promoting physical activity in coronary heart disease patients, by patient education and in self-help groups, has been shown to be effective in reducing the progress of the disease. Regular physical activities are recommended for at least four to five days per week and should last for thirty minutes.

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