



東華學院
TUNG WAH COLLEGE



5th Anniversary Conference

Transition of Care -
Global Developments
and Local Adaptations



Date and Venue

22th October 2016

Viola Y.W. Man Chan Lecture Theatre, Tung Wah College

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Welcome Message by the President

On behalf of Tung Wah College, I would like to extend our warmest welcome to you all to the College's 5th Anniversary Conference today. Special thanks to our officiating guests and the keynote speakers for your presence, support and sharing.

Tung Wah College was established by TWGHs in 2010 and approved by the Hong Kong SAR Government as a self-financing degree granting institution in 2011. Our mission is to provide high quality tertiary education to nurture our youngsters to become socially responsible and caring professionals for the benefits of society.

Since its inception, TWC has been growing rapidly and has developed a niche in medical and health disciplines. Among other things, we are the first self-financing tertiary institution in HK offering professionally accredited degree programmes in Medical Laboratory Science and Radiation Therapy. Besides we also offer health-related degrees like Nursing, Gerontology, Occupational Therapy and so on. Within a short period of time, we have trained up close to 1,000 qualified health professionals.

This Anniversary Conference is the first international conference organized by our College. It is one of the important events to celebrate our 5th Anniversary. The theme of today's conference is "Transition of care: Global Developments and Local Adaptions".

As our population is ageing rapidly (both locally and globally) and there is also growing burden of chronic diseases, transition of care is certainly a contemporary and important issue and also a major challenge not only for policy makers and service providers, but also for healthcare professionals as well as patients themselves. How to coordinate and ensure quality care in moving patients from one setting of care to another and hand-over from one healthcare professional to another? I hope that the conference can provide an opportunity for local and overseas experts, professionals and scholars to exchange forefront knowledge and views on evidence-based practices related to the topic.

Today, we are very honoured to have many prestigious professional experts to share their views and scholars to share their research findings on the theme from various perspectives. With their wisdom and expert knowledge, I am sure that all participants here will be enlightened and provided with guiding light for the future developments in the health arena. I hope that all of you will find the conference fruitful and memorable.

Thank you very much.

Professor LUI Yu Hon

President

Tung Wah College



Opening Speech and Officiating Guests

Opening Speech

Professor Sophia CHAN, Undersecretary for Food & Health

Officiating Guests

Mrs. Katherine MA, Chairman of Board of Directors, Tung Wah Group of Hospitals

Mr. Sunny TAN, Chairman of the Board of Governors, Tung Wah College

Professor Gregg LI, Member of the Board of Governors, Tung Wah College

Mrs. Viola CHAN BBS, Founding Chairman of the College Council, Tung Wah College



Organising Committee

Organising Committee

Chairperson: Professor Matthew YAU Kwai Sang

Co-Chairperson: Professor Sylvia FUNG Yuk Kuen, BBS

Members: Professor GOHEL Mayur Danny Indulal
Professor Meyrick CHOW Chum Ming
Mr. Ken CHAN Wai Kit
Dr. Frances LEE Lai Mui
Ms. Julia WONG Sze Wing
Dr. Ricky WU Wing Kei

Secretary: Mr. Raymond LEE Kai Man

Scientific Sub-committee

Chairperson: Dr. Ricky WU Wing Kei

Members: Dr. CHEUNG Ka Tik
Dr. Ellie CHU Shihng Meir



Programme Synopsis

Time	Programme		
08:30 – 09:00	<i>Registration</i>		
09:00 – 09:30	Opening Ceremony		
09:30 – 10:20	Keynote Speech I: Transition of Care: Global Developments		
10:20 – 10:50	<i>Morning Tea & Poster display</i>		
10:50 – 11:40	Keynote Speech II: Transition of Care: Local Strategies for an Ageing Population		
11:40 – 12:30	Keynote Speech III: Transition of Care: Local Implementation and Challenges		
12:30 – 14:00	<i>Lunch</i>		
14:00 – 15:00	Plenary Sessions		
	Plenary Session I	Plenary Session II	Plenary Session III
	Transition of Care for Families with Special Needs: A Local University Based Multidisciplinary Collaboration Model	Laboratory Investigation of Poisonings – Clinical and Public Health Implications	Transition of Care: Education of Health Professionals - US Experience”
15:00 – 15:30	<i>Afternoon Tea & Poster display</i>		
15:30 – 17:00	Concurrent Sessions for Free Paper Presentation		
	Education of Health Professionals	Diagnostic & Therapeutic Advancements	Transition of Care: Challenge & Success
17:00 – 17:20	Closing Ceremony Vote of thanks		



Programme-at-a-glance

Time	Programme		
08:30 – 09:00	Registration		
09:00 – 09:30	<p>Opening Ceremony Welcoming Speech Professor LUI Yu Hon, President of Tung Wah College.</p> <p>Opening Speech Professor Sophia CHAN, Undersecretary for Food & Health. Venue: King’s Park Campus, 2/F, Viola Y.W. Man Chan Lecture Theatre</p>		
09:30 – 10:20	<p>Keynote Speech I: Transition of Care: Global Developments Professor Elizabeth A. MADIGAN, Independence Foundation Professor of Nursing, Case Western Reserve University. Session Chairperson: Professor Matthew YAU Kwai Sang Venue: King’s Park Campus, 2/F, Viola Y.W. Man Chan Lecture Theatre</p>		
10:20 – 10:50	<i>Morning Tea & Poster Display</i>	Venue: King’s Park Campus, 2/F	
10:50 – 11:40	<p>Keynote Speech II: Transition of Care: Local Strategies for an Ageing Population Dr. LO Su Vui, Director of Strategy and Planning, The Hong Kong Hospital Authority. Session Chairperson: Professor Sylvia FUNG Yuk Kuen Venue: King’s Park Campus, 2/F, Viola Y.W. Man Chan Lecture Theatre</p>		
11:40 – 12:30	<p>Keynote Speech III: Transition of Care: Local Implementation and Challenges Professor Albert LEE, Clinical Professor, School of Public Health and Primary Care, The Chinese University of Hong Kong. Foreign Associate of US National Academy of Medicine. Session Chairperson: Professor Sylvia FUNG Yuk Kuen Venue: King’s Park Campus, 2/F, Viola Y.W. Man Chan Lecture Theatre</p>		
12:30 – 14:00	<i>Lunch</i> Venue: King’s Park Campus, 4/F		
14:00 – 15:00	Plenary Sessions		
	<p>Plenary Session I: Transition of Care for Families with Special Needs: A Local University Based Multidisciplinary Collaboration Model</p> <p>Dr. Alice LAI CHENG Cheng-gea Director & Associate Professor, The Hong Kong Polytechnic University.</p> <p>Session Chairperson: Professor Doris CHENG Pui Wah Venue: King’s Park Campus, 11/F, room 1104</p>	<p>Plenary Session II: Laboratory Investigation of Poisonings – Clinical and Public Health Implications</p> <p>Dr. Tony MAK Wing Lai Chief of Service, Department of Pathology, Princess Margaret Hospital. Deputy Hospital Chief Executive, Princess Margaret Hospital. Service Director (Quality and Safety), Kowloon West Cluster, The Hong Kong Hospital Authority.</p> <p>Session Chairperson: Professor Joseph LEE Sai Kit Venue: King’s Park Campus, 2/F, Lecture Theatre 1</p>	<p>Plenary Session III: Transition of Care: Education of health professionals - US experience</p> <p>Prof. Elizabeth A. MADIGAN Independence Foundation Professor of Nursing, Case Western Reserve University, USA.</p> <p>Session Chairperson: Professor Meyrick CHOW Chum Ming King’s Park Campus, 2/F, Viola Y.W. Man Chan Lecture Theatre</p>



15:00 – 15:30	<i>Afternoon Tea & Poster Display</i> Venue: King's Park Campus, 2/F		
15:30 – 17:00	Concurrent Sessions for Free Paper Presentation		
	Education of Health Professionals Session Chairperson: Professor Doris CHENG Pui Wah Venue: King's Park Campus, 11/F, room 1104	Diagnostic & Therapeutic Advancements Session Chairperson: Professor Joseph LEE Sai Kit Venue: King's Park Campus, 2/F, Lecture Theatre 1	Transition of Care: Challenge & Success Session Chairperson: Dr. Maria HUNG Shuk Yu Venue: King's Park Campus, 2/F, Viola Y.W. Man Chan Lecture Theatre
15:30 – 15:50	A003 Attitudes and performance in collaborative learning among undergraduate nursing students Florence WONG Mei Fung	A024 An action research approach as a strategy to improve pressure ulcer prevention care in private for-profit nursing homes Enid KWONG	A007 Misconceptions about the risks of breast cancer among Hong Kong Chinese women Winnie CHENG Lai Sheung
15:50 – 16:10	A020 Evaluation of student learning experiences from their summer overseas clinical placement programme Susan CHOW Ka Yee	A002 Decreasing drop-out and increasing compliance for herbal medicine research Rose CHAN Yuk Pui	A015 A research protocol to examine the effect of Tai Chi on cognitive functions and functional capability on daily activities, and health-related quality of life (HRQOL) among community-dwelling older people SIU Mei Yi
16:10 – 16:30	A021 Core Competency Model for Infection Preventionists in Hong Kong CHAN Wai Fong	A010 Microbial Contamination on Plastic Trays used in Fast Food Outlets in Kowloon, HKSAR Angela CHUNG Hiu Yi	A019 Fall Proof Project – a preliminary fall prevention exercise program for residents with visually impairment Armstrong CHIU TS
16:30 – 16:50	A022 Factors affecting nursing students' intention to learn infection control in a 3D virtual world Meyrick CHOW Chum Ming	A012 Moxibustion Inhibits Gram-positive and Gram-negative Bacteria: A Study of Standard Strains and Environmental Samples YU Ho Pang	A023 The nature of caregiver burdens of foreign domestic helpers in Hong Kong: a hermeneutic phenomenological study. Ken HO Hok Man
16:50 – 17:10	Q & A	A025 Contribution of virtopsy to marine conservation: Experience gained in the Hong Kong waters and YangTze river Brian KOT Chin Wing	Q & A
17:10 – 17:30	Closing Ceremony Vote of thanks Venue: King's Park Campus, 2/F, Viola Y.W. Man Chan Lecture Theatre		



Conference Information

Internet Access

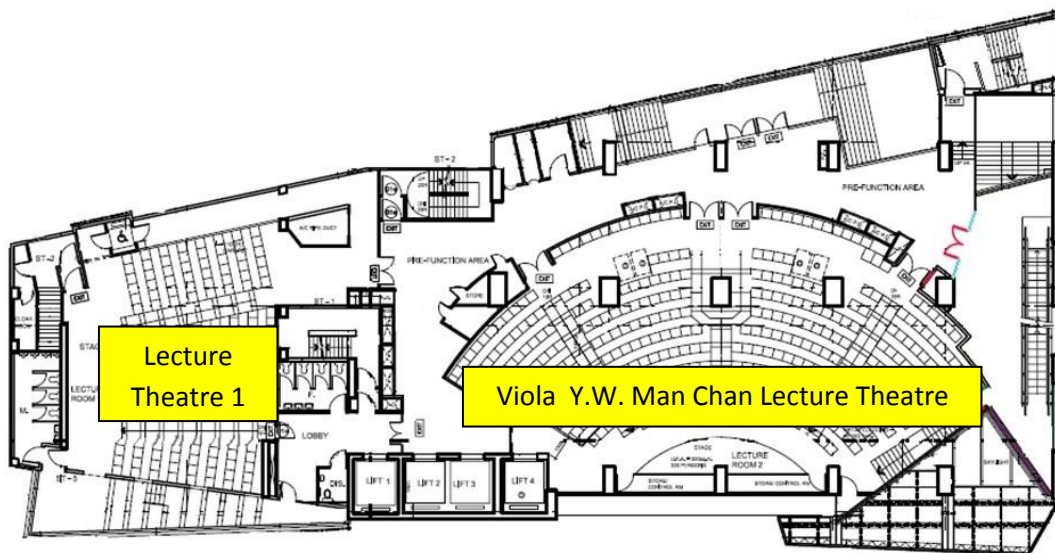
Complimentary Wi-Fi access is available in all the TWC venues. Please select the WiFi Login ID "TWC_GuestWiFi" for internet access.

Adverse Weather Arrangements

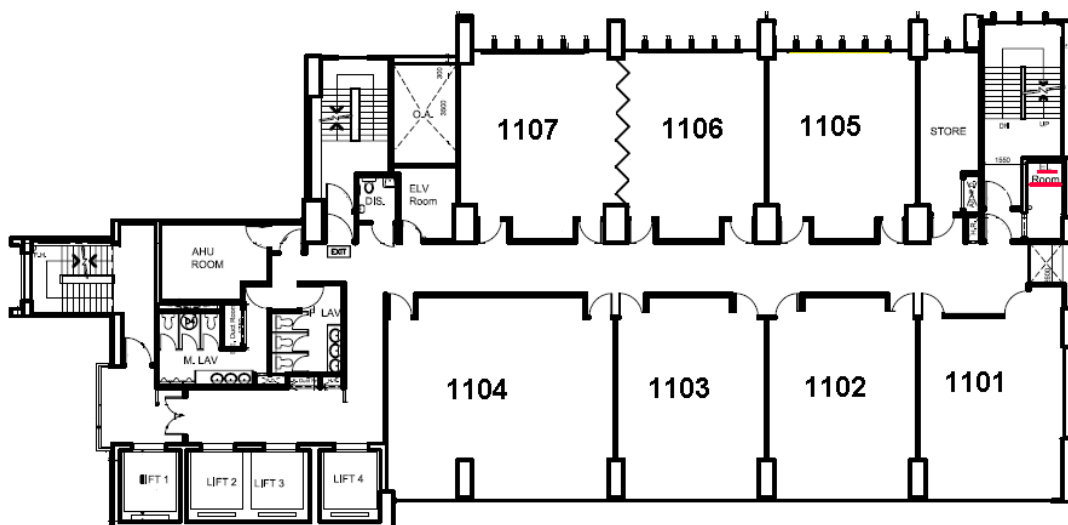
If typhoon signal no. 8 or higher or a rainstorm black warning is in force before Hong Kong Time 06:00, all activities of the conference will be cancelled.

Floor Plan

2/F



11/F



Keynote Speech I

Professor Elizabeth A. MADIGAN

PhD, RN, FAAN

Independence Foundation Professor of Nursing, Case Western Reserve University, USA

Biography

Professor MADIGAN is the Independence Foundation Professor of Nursing at Case Western Reserve University in Cleveland Ohio USA. She has been a nurse since 1979 and home health care nurse, agency administrator and researcher since 1981. She has had multiple studies funded by federal and foundations in examining patient outcomes in home health care. As part of her position at Case Western Reserve University, she leads the Pan American Health Organization/World Health Organization (PAHO/WHO) Collaborating Center for Home Care Nursing, a technical arm of the World Health Organization (WHO). Professor MADIGAN is a Fellow of the American Academy of Nursing and provides consultation and expertise nationally and internationally on home care nursing.

Keynote Speech I

Transition of Care: Global Developments

Abstract

Transitions of care are receiving attention in many countries, driven by patient- or person-centered care initiatives, growth in the aging population, increasing burden of disease and the explosion of chronic diseases. In this presentation, information will be provided on multiple chronic conditions, multimorbidity, their prevalence and their impact on health service utilization. Multiple chronic conditions are highly prevalent, increase with age and persons with multiple chronic conditions consume high levels of health care. Multimorbidity—the combination of multiple chronic conditions, geriatric syndrome and/or functional status limitations increase health care use even more. Interventions for multiple chronic conditions and multimorbidity will be discussed with relevance to transitional care. Transitional care programs are then described with three different models: RED, the Naylor model and Coleman’s model. Common elements of the models are presented with evidence on the providers of effective programs including clinical nurse specialists, nurse practitioners and physicians. Detailed information on effects of transitional care programs will be described for readmissions and mortality within patients with heart failure noting that home visits are the most effective for reducing rehospitalizations and mortality with mixed evidence on other components. Transitional care programs in the US, Australia, Thailand and Japan are then presented, indicating the complexity of the various programs and how they are organized. The session will end with important outcomes to measure or include when planning for transitional care and additional points to consider.



Keynote Speech II

Dr. LO Su Vui

FHKAM (Com Med), FHKCCM, MRCP (UK), FRCP (Edin), FFPHM, FRACMA
Director of Strategy and Planning, The Hong Kong Hospital Authority

Biography

Dr. Lo is Director of Strategy & Planning of the Hong Kong Hospital Authority. He is responsible for formulating corporate-wide planning and strategies to support the Authority to deliver public healthcare services that respond to patient needs and choices. His work portfolio covers clinical specialty service development, workforce planning, capital and facilities planning, and development of primary and community care. He is also responsible for building new hospitals and clinics in the Authority, a capital works portfolio that has received Government earmarked funding of HK\$200bn for the next 10 years.

Prior to this current appointment, Dr. Lo has held a number of senior positions both locally and overseas. These included his role as Head of Research Office at the Food & Health Bureau and Director of Purchasing (Specialist Care Services) with the Cardiff Health Authority of the National Health Service in the United Kingdom.

Professionally, Dr. Lo is a practitioner in Public Health & Administrative Medicine. He has served as a Part I and II examiner of the Faculty of Public Health, and Censor and examiner of the Royal Australasian College of Medical Administrators.

Keynote Speech II

Transition of Care: Local Strategies for an Ageing Population

Abstract

Population ageing is a triumph of development, although it also poses enormous service demands and challenges to the healthcare system. To cope with the challenges locally and meet the healthcare needs of an ageing population, the Hospital Authority (HA) has put in place new strategies and models of care with an emphasis on wellness and minimising the need for hospitalisation through a proactive approach. This has involved strengthening multi-disciplinary integrated care, patient empowerment, and collaboration with community partners. The focus is on providing appropriate care based on the stratified risks or needs of individual patients according to their conditions, with anticipation that older patients with highly complex needs or those with comorbidity will require more public healthcare services.

The stratified care for elderly patients covers three broad categories:

- (i) Supported self-care for the majority of elderly patients who are living in the community with stable chronic conditions or mild episodic illnesses, where the focus is to facilitate self-management of disease conditions through patient education and empowerment in the primary care setting, in close partnership with non-government organisations (NGOs).
- (ii) Chronic disease management for those who have multiple chronic conditions and/or requiring rehabilitation (e.g. chronic obstructive pulmonary disease, chronic heart failure and stroke) in order to prevent complications. An important element is the provision of structured care through multi-disciplinary teams in a coordinated manner.
- (iii) Case management for those with complex needs or severe impairment, who are at high risk of prolonged hospital stay and unplanned readmission. The emphasis is on reducing avoidable hospitalisation and improving community support for these frail patients. The service model requires an integrated and coordinated care approach involving both health and social care professionals, with HA working in partnership with community partners.

The above measures will be further elaborated in this presentation.



Keynote Speech III

Professor Albert LEE

MB BS (Med.Deg-London) LLB (Hons-London) DCH (Ireland) MPH MD (Higher Med Doctoral Deg-CUHK)
FRCP (London & Ireland) FFPH (UK) FRACGP (Aust) US Nat.Acad.Med (Foreign Associate)
FHKAM(FamMed) MCI Arb
Clinical Professor, School of Public Health and Primary Care, The Chinese University of Hong Kong
Foreign Associate of US National Academy of Medicine

Biography

Professor Lee is practising clinician, educational innovator and research leader in Family Medicine and Health Promotion, and a world-renowned pioneer in global health particularly on school health investigating impact of school environment on health and well-being of children and adolescents linking to community and primary health care. His contributions are recognized by his election to the US National Academy of Medicine which is considered one of the highest honours in the fields of health and medicine. Albert is the first elected from Hong Kong. He was also elected as Fellow of Royal Colleges of Physicians (London & Ireland) and Faculty of Public Health in UK because of distinguished services in public health. He has published over 210 papers in peer-reviewed journals, over 150 invited conference/seminar papers, and advisors to WHO and government bodies locally and overseas. In collaboration with French Consulate General Office, he is organizing the event, “**Health and Education Sectors Together for Children’s Health Today and Tomorrow: AN INTERNATIONAL DIALOGUE**” as one of the important themes of the International Day of Francophonie which is celebrated worldwide. Recently Albert has also obtained law degree from University of London and also membership of Chartered Institute of Arbitrators. “Equity and Health” is also his emerging research field.

Keynote Speech III

Transition of Care: Local Implementation and Challenges

Abstract

Transformation of Health Care Delivery: Primary Care focus or Hospital Care dominant?

Primary care with greater care in people’s own living environment has been shown to be cost effective way of health care delivery. However there are many different modes of primary care. In UK and Australia, there are health professionals well trained in primary care with health care system commissioning the provision of different health services in the community. In some countries, there are mix of specialists providing primary care known as community specialists of their respective disciplines. There are other examples of extension of primary care within hospital services. Should we have a system of primary care developed in community setting with hospitals to back up or hospital services as main player with primary care as subsidiary service. One will discuss both perspectives in this presentation.



Plenary Session I

Dr. Alice LAI CHENG Cheng-gea

Director & Associate Professor,
Manulife Center for Children with Specific Learning Disabilities
The Polytechnic University-Peking University Joint Center for Child Development & Learning
Department of Applied Social Sciences, The Hong Kong Polytechnic University

Biography

Dr. LAI was educated at National Taiwan Normal University (BA in English Literature and Education), Michigan State University (MA in Educational Psychology) and Hong Kong University (PhD in Educational Psychology). She is a Chartered Psychologist in UK and a Registered Psychologist in Hong Kong. Dr. LAI is the Associate Professor & Director of Manulife Centre for Children with Specific Learning Disabilities (SpLD) in the Department of Applied Social Sciences; she is also the Director of the Polytechnic University-Peking University Joint Centre for Child Development and Learning in Peking University, Beijing PRC and the Hong Kong Polytechnic University. She has been conducting research into children with Chinese developmental dyslexia and specific learning disabilities for more than 20 years in Hong Kong and Beijing PRC. Her areas of interest include identification and intervention of children at risk for school failure and dyslexia and other specific learning difficulties and how dyslexia is best addressed in Chinese-speaking communities in China and other Chinese speaking communities around the world. She is the Chinese language representative of the World Dyslexia Forum held in Paris in 2010 and provided on-line campus for the assessment and training for children with SpLD. She is active in the local community in supporting families with children with learning difficulties. She was presented with the President's Awards in 1997 for Achievement (Overall Achievement), in all 3 areas, of teaching, research, and community services and the Award of the Best Community Project for the Research on Psychological and Learning Difficulties for Non-Engaged Youth in Hong Kong and the Best Community Project and the Highest Growth Consultant Award in 2011 & 2012 in the Hong Kong Polytechnic University.

Plenary Session I:

Transition of Care for Families with Special Needs: A Local University Based Multidisciplinary Collaboration Model

Abstract

This paper presents details the execution of a research project to comprehensively create a Pilot Scheme of Faculty-Based Multidisciplinary Collaboration Services (FBMCS) conducted by five departments subordinated to the Faculty of Health & Social Sciences and Faculty of Humanities for the purpose of addressing children with special learning needs, and their families. The Strategies and Skills Learning Development Model (SSLD) used as the theoretical underpinning of the research.

This research project was led by a team of consultants within FHSS who were research, clinical and academic experts in the field of specific learning disorders. The project involved comprehensive examinations of 1) features of the multidisciplinary collaborative delivery modes employed by associated experts and health care professionals, 2) the effectiveness of implementation of the Pilot Scheme by the experts/professionals on stakeholders (including children with special learning needs, their parents/primary caretakers, teachers, as well as the Hong Kong Polytechnic University academic staff and students) and 3) an in-depth analysis of the parameters, essential output and outcome indicators for systematizing the Pilot Scheme for future implementation.



In this project, the theoretical framework for developing the Pilot Scheme was based on the Strategies and Skills Learning Development Model (SSLD), a four-level model containing client's Characteristics, Capacities, Competences and Needs (3C1N) with sustained involvement from educational psychologists, case managers (FMT), optometrists (SO), occupational therapists (OT) and speech therapists (ST) to build a comprehensive conceptual model for evaluating and developing children with special learning needs in the context of family and by engaging schools, academic staff, an expert team and the Hong Kong Polytechnic University students. It was hypothesized that the FBMCS impacted the four-level model of the client's 3C1N. A variety of evaluation methods were developed at each level of the SSLD model, pending feedback from different stakeholders. The new evaluation and development model for special needs children were modified and refined after consultation with stakeholders and later consolidated into an inception report.



Plenary Session II

Dr. Tony MAK Wing Lai

Chief of Service, Department of Pathology, Princess Margaret Hospital
Deputy Hospital Chief Executive, Princess Margaret Hospital
Service Director (Quality and Safety), Kowloon West Cluster, The Hong Kong Hospital Authority

Biography

Dr. MAK, a Chemical Pathologist by training, founded the Hospital Authority Toxicology Reference Laboratory (TRL) in 2004. Since then, he has been developing and running the laboratory. TRL is the only local tertiary clinical toxicology laboratory serving all Hong Kong public hospitals. Apart from working up and solving many clinically challenging poisoning cases, the efforts of the laboratory helped to prevent, control and solve numerous poisoning issues with profound public health implications. Examples include the melamine-tainted milk product event; street male sexual function enhancement products contaminated with fatal amount of hypoglycaemics; illicit slimming products causing psychosis; emerging drugs of abuse poisoning; fatal mushroom poisoning; low-iodine level Japanese infant formulae incident; plants-, herbs- and Chinese medicine-related poisonings... The latest example is the lead in drinking water incident in 2015. Apart from his contribution in service, Dr MAK is active in teaching and has published widely in the field of toxicology.

Plenary Session II

Laboratory Investigation of Poisonings – Clinical and Public Health Implications

Abstract

Management of clinical poisoning is challenging as the specific toxin involved is often difficult to confirm at the bedside. For accidental or inadvertent poisoning, the patient may not know what the culprit is. For deliberate self-harm, the patient often does not want to disclose the toxin. Relying on clinical features alone is imprecise. Accurate diagnosis requires laboratory detection of the toxins concerned. Accurate diagnosis enables proper clinical management. Additionally, some poisoning events may have profound public health implications – other citizens exposing to an unidentified poisonous hazard may be at risk. An accurate diagnosis facilitates public health measures to eliminate such hazard.

The Hospital Authority Toxicology Reference Laboratory was founded in 2004 to provide the only tertiary level clinical toxicology laboratory service in Hong Kong. Many services established are unique locally; some are extremely rare – like the investigation of Chinese Medicine related poisonings – in the whole world. This presentation will share a number of interesting poisoning events solved by the Laboratory in the past one decade.



Plenary Session III

Professor Elizabeth A. MADIGAN

PhD, RN, FAAN

Independence Foundation Professor of Nursing, Case Western Reserve University, USA

Biography

Professor MADIGAN is the Independence Foundation Professor of Nursing at Case Western Reserve University in Cleveland Ohio USA. She has been a nurse since 1979 and home health care nurse, agency administrator and researcher since 1981. She has had multiple studies funded by federal and foundations in examining patient outcomes in home health care. As part of her position at Case Western Reserve University, she leads the Pan American Health Organization/World Health Organization (PAHO/WHO) Collaborating Center for Home Care Nursing, a technical arm of the World Health Organization (WHO). Professor MADIGAN is a Fellow of the American Academy of Nursing and provides consultation and expertise nationally and internationally on home care nursing.

Plenary Session III

Transition of Care: Education of Health Professionals - US Experience

Abstract

In this presentation, an overview will be provided of the most common models of transitional care used in the US. Details and elements on the Naylor Model, the Re-Engineered Discharge (RED) Model and the Coleman Care Transitions model will be provided. In addition, newer models will also be discussed including innovations of using emergency medical technicians and having nurse practitioners as part of the emergency medical systems. As part of this presentation, the role of nurses in transitional care will be explained, including the differences between nurse practitioners, clinical nurse specialists, and registered nurses. Educational requirements and role functions will be delineated. The Interprofessional Education of health care students and health care workers will be presented with the gaps for transitional care in the current system and how these gaps are being addressed.



A002 Decreasing drop-out and increasing compliance for herbal medicine research

*Rose CHAN Yuk Pui¹, * CHIEN Wai Tong²

¹ Tung Wah College

² The Hong Kong Polytechnic University

Aims and Objectives:

Ensuring sufficient sample and satisfactory compliance of intervention used in a clinical trial is crucial to enhance its internal validity. This report was to share the experience and highlight the strategies used in the herbal medicine research.

Methodology:

240 subjects with allergic rhinitis participated in the double-blinded controlled trial with repeated-measures, three-arms [i.e., herbal medications - Cure-allergic rhinitis Syrup (CS), Modified Yuping-fen San (MYS) and Placebo] design. In addition to the outcome measures [quality of life, symptoms, and body constitution (BC)] were collected after 4-week herbal medicine, number of participants who completed the 6-month follow-up and self-report daily record of medication taking were used to examine the drop-out and treatment compliance rate, respectively.

Several strategies in reducing drop-outs and increasing compliance were adopted. They included: careful screening for participants with 'Cold' body constitution; better communication with regular telephone follow-up; self-monitoring with diary records and peer monitoring; researcher's monitoring of both therapeutic and adverse effects, user-friendly syrup preparation and administration of medicine, return of drug bottle for exchange with new dose of medicine.

Results and Discussion:

14.3% (13 out of 42) participants dropped in the pilot study, from whom only 3 showed non-compliance. In the main study, further improvements were found in drop-out with 3.6% (9 out of 249) and 1.7% non-compliance. The Generalized Estimating Equation test followed by pairwise contrasts tests indicated that the CS group had a significantly greater reduction of symptoms ($p < 0.0005$), and improvements in QoL ($p < 0.003$) and Qi-deficiency, Yang-deficiency and Inherited Special BC ($p < 0.03-0.002$) over 6 months follow-up, when compared the placebo.

Conclusion:

Drop-outs and non-compliance of herbal medicine in clinical trials were important concerns for researchers. Comprehensive research protocol, better communication/follow-up, user-friendly intervention may provide not only desirable benefits but also low non-compliance and adverse effects of the herbal medicine, thus reducing drop-outs of the participants.



A010 Microbial Contamination on Plastic Trays used in Fast Food Outlets in Kowloon, HKSAR

*Angela CHUNG Hiu Yi¹, CHEUNG Ka Tik¹

¹Tung Wah College

Background:

Microbial contamination on plastic trays used in fast food outlets were investigated to evaluate the source and degree of bacterial and fungal contamination, which is closely-related with plastic trays cleaning and sanitization. *Escherichia coli* and methicillin-resistant *Staphylococcus aureus* were targeted as fecal contamination and biocides-resistant indicator. *Staphylococcus aureus* is also indicative of foodborne infection.

Aim and Objectives:

This study aims to identify the role of food-serving surfaces in food contamination, and cause food poisoning. Previously, food poisoning was found closely-related to processed food contamination by food handlers and food preparation surfaces, while food-serving surfaces remain uninvestigated. *Escherichia coli*, *Staphylococcus aureus* and methicillin-resistant *Staphylococcus aureus* (MRSA) were chosen as target organisms, to indicate/predict fecal contamination, chance of food poisoning and biocides (and antibiotics)-resistance.

Methodology:

In each district of Kowloon, 1 fast food outlet is chosen randomly and collect 10 samples. A total of 50 samples were collected by Amies Swab. Swab materials were inoculated onto chromogenic agar and all organisms that grow into observable colonies were identified or described by biochemical characteristics.

Results and Discussion:

171 isolates obtained from 50 specimens taken from Kowloon, HKSAR. Target organisms were not isolated. Coagulase-negative staphylococci (CoNS) and *Micrococcus* spp. are predominant. They account for 25.7% and 18.1% of all isolates respectively. Skin commensals being the major source of microbial contamination. 2 of the isolates were identified as *Enterococcus* spp., fecal contamination was also suggested. Results suggest ineffective sanitization on used plastic trays and a lack of awareness on microbial contamination on food-serving surfaces.

Conclusion:

Human skin flora was identified to be the main source of microbial contamination on plastic trays. Fecal contamination was also revealed. These suggest ineffective sanitization procedure applied in tray cleaning. Possibility that plastic trays serve as medium to transmit pathogen cannot be ruled out.



A012 Moxibustion Inhibits Gram-positive and Gram-negative Bacteria: A Study of Standard Strains and Environmental Samples

*YU Ho Pang¹, CHEUNG Ka Tik¹

¹Tung Wah College

Background:

Moxibustion is a therapy of Traditional Chinese Medicine (TCM) with generally low toxicity. It was shown to inhibit bacterial growth and gram-positive (GP) bacteria appeared more susceptible, which was not studied in detail.

Aim and Objectives:

This study aims at finding out whether GP bacteria is more susceptible to moxibustion than gram-negative (GN) bacteria.

Results and Discussion:

Unexpectedly, this study discovered that the susceptibility of GP and GN bacteria is statistically similar, while bacteria from environmental sample is significantly more susceptible than standard strains. Nevertheless, without knowledge of antibacterial mechanism, understanding the variation of susceptibility is difficult.

Conclusion:

This study points out that antibacterial effect of moxibustion cannot be simply attributed to the type of bacterial cell wall, but may also involve other biochemical factors, or even a combination of factors. Further in-depth study at molecular level is needed for understanding the antibacterial mechanism and the cause of susceptibility.



A024 An action research approach as a strategy to improve pressure ulcer prevention care in private for-profit nursing homes

*Enid KWONG¹, Maria HUNG¹, Kelvin WOO¹

¹Tung Wah College

Background:

Improving quality of care often involves change of practice which induces fear and uncertainty to the people involved, and results in resistance and non-adherence to the changes initiated. Adopting an action research approach, we aimed to improve pressure ulcer prevention care and develop a pressure ulcer prevention protocol for private for-profit nursing homes where the majority of care staff members are non-professional and less trained.

Methodology:

A total of 474 residents and care staff who were health workers, personal care workers, and/or nurses from four private, for-profit nursing homes in Hong Kong participated in this study. Three cyclic stages and steps, namely, unfreezing (planning), changing (action), and refreezing (results) were carried out. During each cycle, focus group interviews, field observations of the care staff's practices and inspections of the skin of the residents for pressure ulcers were conducted to evaluate the implementation of the protocol. Qualitative content analysis was adopted to analyse the data. The data and methodological triangulation used in this study increased the credibility and validity of the results.

Results and Discussion:

The following nine themes emerged from this study: prevention practices after the occurrence of PUs, the improper use of pressure ulcer prevention materials, non-compliance with several prevention practices, improper prevention practices, the perception that the preventive care was being performed correctly, inadequate readiness to use the risk assessment tool, an undesirable environment, the supplying of unfavorable resources, and various management styles in the homes with or without nurses. At the end of the third cycle, the changes that were identified included improved compliance with the revised risk assessment method, the timely and appropriate use of PU prevention materials, the empowering of staff to improve the quality of PU care, and improved home management.

Conclusion:

Through the action research approach, the care staff were empowered and their PU prevention care practices had improved, which contributed to the decreased incidence of pressure ulcers. A PU prevention protocol that was accepted by the staff was finally developed as the standard of care for such homes.



A025 Contribution of virtopsy to marine conservation: Experience gained in the Hong Kong waters and YangTze river*Brian KOT Chin Wing¹¹Tung Wah College**Background:**

Virtopsy on the stranded cetaceans is an established technique performed on most carcasses found in the HK waters and Yangtze River over the last 2.5 years. It is used primarily to assist veterinarians and scientists in determining cause of death, but is also invaluable to investigate the life history of stranded individuals.

Aims and Objectives:

This study aimed to evaluate the practicality of virtopsy techniques in stranded cetaceans and compared the findings obtained by conventional necropsy.

Methodology:

Between March 2014 and September 2016, whole body virtopsy of 103 cetacean carcasses stranded in Hong Kong waters and Yangtze River were performed and analyzed for pathologic findings. MDCT was performed on a 16-slice multi-detector row Toshiba Alexion™ CT system or a 64-slice Somatom Definition Dual Energy CT system. The MRI examination of brain, thorax and spine was performed on a 0.25T Esaote Vet MRI Grande scanner or a 3.0T Siemens MRI Magnetom Trio scanner. Post processing was performed with the built-in software and/or TeraRecon Aquarius workstation. Radiological findings were compared with subsequent necropsy findings.

Results and Discussion:

Most of the radiological findings, pertaining to head and neck, heart and vascular, thorax, abdomen, vertebral column and pectoral limbs, corresponded to necroscopic findings. MDCT was useful in diagnosing fatal hemorrhage, organ herniation, and pathological gas collection, as well as determining the number, shapes and characteristics of the fractures sites and the direction of external force. MRI was effective in evaluating soft tissue lesions, musculoskeletal injuries, integrity of spinal cord and brain herniation. Radiological assessment of the degree of epiphyseal fusion/ossification at postcranial skeleton allowed individual age-at-death estimation, supplementing the data obtained by dental growth layer group pattern.

Conclusion:

This study demonstrated virtopsy is a powerful tool, providing non-invasive and objective measurements to supplement the necroscopic findings for cetacean death and life history investigation, which potentially aids marine conservation planning and management.



A009 Comparison of the effectiveness of anti-bacterial hand soap and waterless alcohol hand rub on medical laboratory students and detection of Staphylococcus aureus carriers

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¹ Tung Wah College

Background:

Alcohol-based hand rubs are found to be an alternative way to maintain hand hygiene with effective eliminating some of the dust-borne bacteria. The advantages over traditional hand cleaning with hand soap are that it saves time and convenience. Kokate, Rahangdale and Tellharkar (2015) stated that Staphylococcus aureus is a common bacteria that found to be contaminated on medical students' hands due to contact with bacterial samples.

Aims and Objectives:

The study had found that medical students had enhanced the chance of colonization and infection by bacteria and become a nosocomial infection carrier in hospital later in their practicum in the hospital. Alcohol-based hand rub w claimed to have an anti-bacterial function which could kill over 99.9% bacteria.

Methodology:

34 samples from medical laboratory students from year 2 to 3 were collected form Tung Wah College. Samples were incubated on nutrient agar and unwashed hands' colonies were compared with washed hands' colonies, data will be collected by comparing the ratio of colonies. Identification of S. aureus was done with gram stain, catalase test, coagulase test and inoculation on mannitol salt agar.

Results and Discussion:

The result had found that alcohol-based hand rub was more effective in bacterial and S. aureus elimination.

Conclusion:

It is recommended that medical students should use alcohol hand rub as cleaning agent after practical class and hand wash is needed when there are visible dirty on hands.



A011 Incidence of Escherichia coli, Pseudomonas aeruginosa and Staphylococcus aureus on Tap of Drinking Fountains in Kowloon

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¹Tung Wah College

Aims and Objectives:

To raise attention for hygiene and the proper usage of drinking fountains.

Methodology:

Escherichia coli, Pseudomonas aeruginosa and Staphylococcus aureus is used as contamination indicators of the tap of drinking fountains. Kowloon is selected as sampling area due to a relatively high population density that may indicate a higher usage of the drinking fountains. 20 random drinking fountain tap samples were collected for isolation of bacteria with identification based on colony morphology, Gram reaction and biochemical test reactions.

Results and Discussion:

The result is as expected having a relatively small proportion of positive isolations of Escherichia coli and Pseudomonas aeruginosa with absence of Staphylococcus aureus. There were variables encountered with unstated disinfection timetable and unclear schedule for the change of filter for drinking fountains. Therefore, the possibility of bacterial colonization due to lack of disinfection cannot be ruled out.

Conclusion:

Checklist of disinfection time and date of changing filter should be opened to public for health concerns, while citizens should be educated for responsibilities when using public facilities, not only drinking fountains



A017 Determination of anticoagulation effect of Rhizoma Atractylodis Macrocephalae (RAM) on human blood: an *in vitro* study

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¹Tung Wah College

Background:

Human body arrests bleeding of blood vessel injuries through haemostasis in which the three coagulation pathways (the intrinsic, extrinsic and common pathway) play a major role in the mechanism. Rhizoma Atractylodis Macrocephalae (RAM), is a traditional Chinese herb which belongs to the Compositae family. Traditionally, RAM acts as a tonic and diuretic herb and has been used as a remedy to strengthen the functions of stomach and spleen. Studies have reported that RAM possesses anticoagulation effect. However, there is no evidence showing that the herb can prolong clotting time through interrupting the coagulation cascades.

Aims and Objectives:

To investigate the simultaneous and time-dependent anticoagulation effects of RAM via *in vitro* coagulation assays.

Methodology:

Clotting time of controls and RAM (23.0mg/ml)-treated samples were measured by *in vitro* prothrombin time (PT), activated partial thromboplastin time (APTT) and thrombin time (TT) assays at different incubation times (0, 1, 2 hours).

Results and Discussion:

Anticoagulation effects of RAM was only observed in APTT and TT assays at 0 and 1 hour respectively. No significant prolongation of clotting time was shown in PT assay.

Conclusion:

This study suggests that the aqueous extracts of RAM carry anticoagulation effects by inhibiting the intrinsic coagulation pathway and the reaction of thrombin during the conversion of fibrinogen to fibrin.



A018 A novel method for diagnosing memory encoding impairments*Michael KUO¹¹Tung Wah College**Background:**

Mild cognitive impairment (MCI) has been thought as an intermediate stage between normal aging and mild dementia. People with MCI have difficulties with semantic type of encoding.

Aims and Objectives:

This study investigates semantic memory encoding processes in young, older and people with mild cognitive impairment using event-related potentials (ERP). The aim is to propose a novel method for diagnosing memory encoding impairments.

Methodology:

Eleven younger, eight older and 10 MCI individuals participated. Subsequent memory paradigm was used. A series of Chinese characters were processed semantically at study (i.e., encoding) phase. During the recognition phase, studied or unstudied judgments were performed. Participants' brain electrical activities during the study phase were recorded. Analyses of brain activities were focused on the late positive complex (LPC) window, which typically exhibits a positive-going pattern.

Results and Discussion:

Younger group performed the best behaviourally, followed by the older group and then the MCI groups. These results were accompanied by larger brain electrical activities in the younger sample compared to the older sample. An atypical negative-going pattern in the brain activities was identified in the MCI group in the posterior sites. Abnormalities in ERPs at LPC window should index altered memory encoding processes and might be associated with early signs of memory deficits.

Conclusion:

The ERP method employing a similar task design might be used for diagnosing memory encoding impairments. Posterior brain sites might exhibit the most atypical effects.



A026 Effect of pretreatment on methyl green staining as a fluorescent DNA label

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Background:

Methyl Green stain has been developed as histological DNA stain for decades, with currently identified its ability as a fluorescent stain for DNA under fluorescent microscopy.

Aims and Objectives:

In the study, the effect of fixatives and fixation temperature on methyl green as DNA fluorescent stain was studied. Hepatocellular carcinoma cells (HepG2 cell) were used to study the effect of various fixatives and temperature on methyl green.

Methodology:

Fluorescence images were captured by Nikon Eclipse Ti microscope. FIJI Image J software was used to quantify the fluorescent intensity. Numerical digital data obtained among different scenarios were compared.

Results and Discussion:

Results indicated that 4% formaldehyde and 100% ethanol given the strongest DNA fluorescence signals among the four tested fixatives (5% acetic acid, 4% formaldehyde, 100% ethanol and 0.1% saline + ethanol). Results also revealed that 37 degree Celsius fixation is the optimum condition for methyl green staining among the three tested temperature settings (4, 25 and 37 degree Celsius).

Conclusion:

The findings recommended that the optimum conditions for methyl green as DNA fluorescence dye are fixed in either 4% formaldehyde or 100% ethanol at 37 degree Celsius.



A003 Attitudes and performance in collaborative learning among undergraduate nursing students*Florence WONG Mei Fung¹¹Tung Wah College**Background:**

Collaborative approach embraces benefits in knowledge enhancement and skill development. This approach has been commonly applied in professional trainings, including nursing education, as nurses are professionals to collaborate with other disciplinary healthcare teams to provide optimal healthcare service and ensure patient outcomes at their workplaces. Students' attitude is the key of learning achievement. However, knowledge about learning attitudes of undergraduate nursing students in this approach is inadequate.

Aims and Objectives:

To understand more about learning attitudes and performance of undergraduate nursing students in collaborative learning approach.

Methodology:

A cross-sectional design was conducted with a survey using the self-reported Student Attitudes toward Group Environment (SAGE) to measure learning attitudes and performance of undergraduate nursing students in collaborative approach.

Results and Discussion:

A total of 327 undergraduate nursing students were recruited. Most of the students (85%) agree with the beneficial effects on knowledge and skill development, relationships building, and collaborative enhancement. However, some concerns, such as inadequate discussion and unfairness of grading/work distribution while working in a group were reported. Of four learning attitudinal domains, the quality of product and process (mean 46.9 and SD 6.39) and the student interdependence (mean 39.37 and SD 4.23) were significant in collaborative approach. Collaborative learning approach effectively enriches knowledge and develops skills. Two attitudinal learning domains indicate better students' learning attitudes and performance determined by effective collaborative group formation with friends and interpersonal relationship. The results also raise the awareness of nurse educators to develop strategies for facilitating students' learning through forming effective groups, promoting group collaboration, and ensuring the fairness of grading and work distribution.

Conclusion:

The results indicate significant areas influencing students' learning attitudes and performance positively and negatively in collaborative learning. Educators may consider those areas to develop better environment to improve students' learning attitudes and performance in collaborative approach.



A020 Evaluation of student learning experiences from their summer overseas clinical placement programme

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²The Hong Kong Polytechnic University

Background:

The move of nursing education to tertiary institutions allows the opportunities for students to participate in international programmes. Previous researches showed that students participating in these programmes have gained enhanced cultural awareness and experiences in personal and professional growth. On the other hand, students faced various challenges in these overseas programme. There is a crucial need to evaluate students' learning outcomes to improve the existing programme and in justifying the use of resources.

Aims and Objectives:

To evaluate the views and perceptions of nursing students participated in summer clinical placement in China. To assess nursing students' perception of the clinical learning environment before and during the placements. To explore the differences between nursing students' perceptions of their Preferred and Actual clinical learning environment. To identify the predictors that contribute to students' satisfaction in the clinical learning environment.

Methodology:

The study was a cross-sectional, descriptive study. Consecutive sampling method was used to recruit all nursing students who participated in the summer clinical placement in China. The Clinical Learning Environment Inventory (CLEI) was used to measure students' perception on clinical learning environment before and after the placement. The two versions, including the Preferred and Actual Forms were used.

Results and Discussion:

There were 139 questionnaires and 122 questionnaires returned before and after the placement, respectively. The six subscales of CLEI including 'Personalisation', 'Task Orientation', 'Student Involvement', 'Innovation', 'Individualization' and 'Satisfaction'. The mean scores of all the subscales of the Preferred Form are comparatively higher than Actual Form. Students had higher expectations on the learning environment before the placement. Task orientation, innovation and individualization were found to have statistically significant difference between the Preferred and Actual form ($p < 0.001$). Task orientation, personalization, innovation and student involvement were predictors of students' satisfaction of the placement and shared 47.1% of the variance.

Conclusion:

The findings of this survey raise issues regarding the supportive psychosocial learning environment and it may be help to take this into account when considering future overseas placement programmes.



A021 Core Competency Model for Infection Preventionists in Hong Kong

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²James Cook University

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Background:

Within the core competency of a specialist profession, the critical competency is the most important portion to serve as the content of specialist certification programme.

Aims and Objectives:

To develop a core competency model for infection preventionists in Hong Kong.

Methodology:

Based on the framework of core competency areas of Registered Nurses defined by The Nursing Council of Hong Kong, core competency of infection preventionists in Hong Kong was drafted according to the inputs from literature and Delphi survey. Content validity and reliability estimates were established by different surveys. An opinion survey on the field practitioners was followed to collect their perceived importance levels on individual items. Rasch measurement was used to finalise the core competency items with corresponding importance levels. As a result, a comprehensive list of core competency items for infection preventionists of Hong Kong was identified. A qualitative expert consensus survey was used with safety margin added before concluding the critical competency. Finally, a core competency model for infection preventionists in Hong Kong was described.

Results and Discussion:

The core competency of infection preventionists in Hong Kong consisted of 76 items in 10 categories was established within framework of registered nurses of Hong Kong. The critical competency consists of 63% of the content weight of the core competency. However, it only covers four out of five areas of the framework.

Conclusion:

The findings inform the infection preventionists, their employers and the public about the required proficiency of an infection preventionist in Hong Kong. When certifying the infection preventionists in the future, the critical competency should be covered in the content of certification programme. The development process of this research may serve as a process model for developing the certification content blueprint for other nursing and healthcare professional groups.



A022 Factors affecting nursing students' intention to learn infection control in a 3D virtual world

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²The Hong Kong Polytechnic University

Background:

There is heightened awareness of the importance of infection control and prevention in healthcare settings. This concern is partly in response to the emergence of formerly unknown infectious diseases and multi-resistance bacterial infections. Nursing students are particularly vulnerable to infectious diseases because of their need to interact with patients and inexperience in using personal protective equipment. 3D virtual world is a computer-based simulated environment which can provide a safe environment for nursing students to practice skills and learn from their mistakes without disadvantage.

Aims and Objectives:

The objective of this study is to explore factors affecting nursing students' intention to learn infection control in a 3D virtual world.

Methodology:

A 3D virtual world was developed by the research team that allows nursing students to learn and practice selecting and using personal protective equipment. Data was collected from nursing students by means of questionnaires. A total of 185 valid questionnaires were returned, and the response rate was 96.4%. Structural equation modeling was used to test the research hypotheses.

Results and Discussion:

Factors directly affecting nursing students' intention to learn infection control in a 3D virtual world were perceived usefulness and attitude toward using. Besides, perceived ease of use was found to indirectly affecting intention via its effect on perceived usefulness and attitude toward using. The factors explained 79% of the variance in nursing students' intention to use the 3D virtual world. The results of this study provided insights into the best way to design and promote interactive education programmes in virtual world.

Conclusion:

The interactive 3D education programme was perceived as easy to use and useful, and nursing students had positive attitudes and in general intended to use it to learn the proper selection and use of personal protective equipment in the future.



A001 The Effect of Challenge Based Learning on Nursing Students' Approaches to Learning*Anson TANG¹¹Tung Wah College**Background:**

Challenge Based Learning (CBL) has been found to be an effective teaching strategy to facilitate students' deep learning in various disciplines. Its effect on nursing students has been receiving scanty attention.

Aims and Objectives:

The study aimed to investigate the effect of CBL on learning approach of undergraduate nursing students.

Methodology:

It was a one-group pretest-posttest design. Data was collected from January to April 2016 at Tung Wah College. Year 3 nursing students from Bachelor of Health Science (Honours) programme undertaking the primary care course in which CBL was implemented over the study period were invited to participate in the study. The revised two-factor Study Process Questionnaire was administered to measure the change in students' learning approach before and after completing the course. Paired t test was used to compare the difference in mean scores of the deep and surface approaches between pretest and posttest.

Results and Discussion:

130 participants returned the questionnaires with a response rate of 81%. 28 of them were male (21.5%) and 102 of them were female (78.5%). Before the course started, the mean score of the surface approach was significantly higher than that of the deep approach ($t=4.51$, $p=0.000$). Both deep and surface approaches had a significant increase in mean scores in posttest as compared to the pretest ones ($t=8.83$, $p=0.000$; $t=3.70$, $p=0.000$ respectively). It was noted that the pretest-posttest mean score difference of the deep approach was significantly higher than that of the surface approach ($t=3.22$, $p=0.002$). The dominance of the surface approach in nursing students at the beginning of the study could be explained by the fact that traditional assessment approaches were commonly adopted in courses in the first two years of the curriculum. The significant increase in the mean score of the deep approach in the posttest revealed a shift of students' learning approach after attending a course using CBL.

Conclusion:

CBL is a promising teaching strategy to facilitate deep learning in nursing students. Further studies using more vigorous research methodology are suggested to validate the findings.



A004 Collaborative Support in Education of Health Profession*Mabel YAU¹, Jade Wong¹¹Tung Wah College**Background:**

Health service is a team service. Patient safety bases on the effective partnership of different professional parties. WHO published “The Framework for Action on Interprofessional Education and Collaborative Practice” to stipulate the positive health outcomes of interprofessional education in 2010. Entraining “collaborative practice-ready” (CP-R) health workers was the goal. Prior understanding of collaborating professions deemed beneficial. With the compact design of curriculum in each of the professional trainings, local strategic approach facilitates better CP-R education. TWC implemented a series of health profession programmes. The intensive curriculum of professional trainings may not allow room for non-discipline courses in each programme. Co-ordinations of the administrative units in curriculum and programme deliverables help in creating a holistic CP-R platform for the health disciplines.

Aims and Objectives:

To create a common learning platform for training CP-R students

Methodology:

Seminars and workshops on different generic knowledge are opened for free registrations. Selected seminars were being promoted at course levels with assignments or exercise for intended learning outcomes. Feedbacks were also collected for evaluation.

Results and Discussion:

30 college seminars and 36 library workshops were organized in the last 2 semesters. A total of 1918 enrollments were received. Healthcare related seminars took up 94% of the audience with 85% of these audience were from health related programmes. 36 library workshops on research skills were tailor-made for courses. 19 of the health specific workshops were attended by 374 participants. Follow up evaluations showed increased interest in the topics and enhanced knowledge in the areas.

Conclusion:

Administrative supports formulate a coordinating platform for knowledge transfer and benefit student learnings. Sharing of discipline knowledge is possible through designed assessments at course level. Students are more focused at the delivered topics with instructors’ guidance. “Collaborative Practice–Ready” can be enhanced with holistic planning in the deliveries.



A005 Undergraduate student nurses' learning experience from using concept mapping in medical-surgical nursing

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Background:

Many student nurses are weak in studying medical-surgical nursing because it requires higher-order thinking and critical thinking skills. Students are first required to understand and connect their prior knowledge with new knowledge, and then use the nursing process approach to formulate a holistic nursing care plan. In order to enhance their learning, concept mapping was adopted in a medical-surgical nursing course.

Aims and Objectives:

The aim of this study was to explore student nurses' perceptions about the effects of concept mapping in their learning process.

Methodology:

This was a qualitative study and several focus group interviews were used.

Results and Discussion:

A total of 16 student nurses were interviewed in groups. The results show that concept mapping is able to show the relationships between nursing problems and nursing interventions in a systematic and well-organised way with a sense of categorisation. This form of presentation gives them a clear and whole picture in a short period of time which further enhances their understanding of topics, facilitates their learning and promotes better memorisation. When it was used in group discussion for doing in-class scenario-based exercises, learners expressed that they could learn from classmates because they may miss some points while drawing the concept map and their classmates would help to supplement it. However, when preparing for the written examination, they preferred to use conventional nursing care plan formats, i.e. table and point forms instead of concept mapping because it is not time-consuming and they could easily prioritise the nursing interventions from specific to general. Thus concept maps can be very extensive which makes them difficult to read. In addition, there are keywords in concept maps only, but they cannot provide the details. Therefore, they read the PowerPoint notes provided by the lecturers and textbook for revision, while concept mapping is used for consolidation only.



A006 The effect of peer instruction on promoting student nurses' deep learning and motivation in medical-surgical nursing: A mixed method research study

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Background:

Medical-surgical nursing is a core subject in nursing education in which student nurses study diseases and relevant nursing interventions. This field provides student nurses with training relevant to clinical practice, as they formulate nursing care plans to provide patients with appropriate, effective and holistic care. However, student nurses consider this subject one of the most difficult because of the higher-order thinking skills required to master and connect the concepts. In this field, student nurses do not seem to benefit from traditional didactic teaching; therefore, this study introduces Peer Instruction (PI), together with information and communication technology, to the student nurses' educational plan.

Aims and Objectives:

The purpose of this study is to evaluate the effectiveness of PI in promoting deep learning and motivating students in the field of medical-surgical nursing.

Methodology:

The participants of this study are the second-year student nurses in the same cohort in the Higher Diploma in Nursing programme. In this mixed method research study, peer instruction, with the support of Edmodo, served as the intervention. During lectures, pre- and post-concept tests were used to evaluate students' comprehension of material. After all of the lectures, a survey was conducted to evaluate the students' satisfaction with PI in terms of learning experiences, motivation and deep learning. In addition, the instructor used a reflective journal to record her experiences employing PI in the lectures.

Results and Discussion:

Both objective and subjective results showed that students' understanding significantly improved after peer discussion and that the majority of the students agreed that PI provided them with a positive learning experience, enhanced their motivation to learn and promoted deep learning.

Conclusion:

PI with ICT is effective in fostering deep learning and increasing students' motivation to pursue medical-surgical nursing. Using PI in teaching medical-surgical nursing successfully transformed students from passive listeners to active learners. Through fruitful peer and class-wide discussions, students' understanding can expand.



A008 Effects of high-fidelity patient simulation in clinical education to undergraduate nursing students*Kevin LUK Kar Ho¹, Henry SO Chi Fuk¹¹Tung Wah College**Background:**

The use of high-fidelity patient simulation (HFPS) has become increasingly commonplace in nursing education nowadays. However, few studies have been conducted on how HFPS in clinical nursing education affects clinical reasoning skills of nursing students. The effectiveness of HFPS in clinical teaching was evaluated in this study for baccalaureate nursing programme in Hong Kong.

Aims and Objectives:

To investigate the effects of HFPS in clinical nursing education on full-time nursing undergraduates.

Methodology:

Students with clinical experience (n = 644) and without clinical experience (n = 472) were involved in this study conducted from March 2015 to April 2016. Firstly, they were briefed and lab-orientated. Then, they were led to simulation laboratory with HFPS, participating in one scenario involving COPD, bowel obstruction, spinal injury, or blood transfusion. After that, students were debriefed and then invited to complete a survey based on the Program for Nursing Curriculum Integration (PNCI®) Simulation Effectiveness Tool (SET) permitted by CAE Healthcare to investigate the effectiveness of HFPS in clinical teaching.

Results and Discussion:

Independent t-test was used for analysis on the collected data from the survey using SPSS version 23. Students without clinical experience showed stronger agreement than students with clinical experience that the simulated scenarios helped them understand classroom information better (p = 0.000). Also, students without clinical experience had stronger feelings than students with clinical experience that they developed a better understanding of pathophysiology of the condition (p = 0.000) and medications (p = 0.000) in the simulation. Students without clinical experience also felt more strongly that they learned as much from observing peers as being an active participant in the simulation (p = 0.001).

Conclusion:

This study supported students without clinical experience learned more via clinical nursing education involving HFPS than those who had. In addition, both groups were positive to HFPS. Thus, clinical nursing education involving HFPS should be encouraged in nursing education.



A013 A cross sectional survey study of knowledge and attitude of cardiopulmonary resuscitation among healthcare students in Hong Kong

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Background:

Out-of-hospital cardiac arrest is the common cause of death globally. For those who suffer from sudden cardiac arrests, early high-quality cardio-pulmonary resuscitation (CPR) can greatly improve chances of survival. The importance of CPR is well recognized and emphasized by American Heart Association. Healthcare students in college are the potential bystanders to perform CPR in emergency situations in the community.

Aims and Objectives:

To explore the knowledge and attitude of CPR towards out-of-hospital cardiac arrest among healthcare students in Hong Kong.

Methodology:

Cross sectional survey with convenience sampling was conducted in a tertiary college. Total 506 hard copies of well-validated questionnaires were distributed from September to October, 2015.

Results and Discussion:

Among 351 respondents, 73 (22%) were male and 278 (79%) were female. The mean knowledge score of respondents was 4.97 ± 1.613 out of 10. About half (55.3%) had attended CPR training course and 81.4% of these respondents possess valid CPR certificates. The main reason for having CPR training was "interest" (46.5%) while the common reasons for non-trained students were "no time" (45%), "not sure where to attend a course" (19.6%) and "not necessary" (15.3%).

The mean attitude score was 26.53 ± 2.684 out of 30. 87% of the participants showed willingness to provide CPR and believed that CPR would increase the survival rate (39.4%). The respondents tended to attempt CPR for all the needy 33.2%. Lack of confidence due to untrained (19.1%), forgetting technique (28.8%), being afraid harming the victim (26.4%) were the major barriers to provide CPR.

Conclusion:

Inadequate knowledge and training is recognized though healthcare students hold positive CPR attitude. Incorporation of CPR training into the college curricula could be a long term strategy in order to enhance the CPR benefits to the wider community. To ensure better knowledge and skills retention, organize regular and refresher training programs are recommended.



A007 Misconceptions about the risks of breast cancer among Hong Kong Chinese women*Winnie CHENG Lai Sheung¹¹Tung Wah College**Background:**

The incidence of breast cancer among women is increasing globally. In Hong Kong, breast cancer ranks as the most common cause of cancer death in women. It is known that modifiable lifestyle and breast screening behaviours contribute to reduce the risks of breast cancer. If women know the risks associated with breast cancer and engage in breast wellness practice, they will have a better chance to prevent this disease. Yet, no studies have been conducted to explore the perceived risks of breast cancer among Hong Kong Chinese women.

Aims and objectives:

This study attempted to explore the perceived risks associated with breast cancer among Hong Kong Chinese women. The findings of this study can help health care professionals develop appropriate strategies to promote awareness of Hong Kong Chinese women about the risks of breast cancer, and thereby reduce its incidence.

Methodology:

A survey using questionnaire was designed to assess the perceived beliefs on the risks of breast cancer among Hong Kong Chinese women and their breast screening practice. Convenience sampling was used to recruit the participants.

Results and Discussion:

223 participants participated in this study and completed the questionnaire. More than half of the participants held misconceptions about breast cancer risks. They have inadequate knowledge on the risks associated with breast cancer. Less than half of the participants (39.9%) performed breast examination. There is no significant relationship between the knowledge on breast cancer risks and breast screening practice. Only those women who were well-educated and had higher family income performed breast screening for cancer.

Conclusion:

The findings of this study suggest health care professionals should channel resources to educate Hong Kong Chinese women about the risks of breast cancer and promote breast wellness; and improve access to breast cancer screening for women especially those are in lower socio-economic strata.



A015 A research protocol to examine the effect of Tai Chi on cognitive functions and functional capability on daily activities, and health-related quality of life (HRQOL) among community-dwelling older people

*SIU Mei Yi¹

¹Tung Wah College

Background:

The prevalence of older people with cognitive decline is increasing since the aging population is growing substantially worldwide. Cognitive impairment places older adults at high risk for functional disability. Previous researches have provided strong evidence on the beneficial effect of physical exercise on maintaining cognitive function in older adults. Tai Chi is considered as a low to moderate intensity exercise, which is performed in a slow and rhythmic movement. It is a popular and safe exercise suitable for older people who have weaker muscle strength.

Aims and Objectives:

The aim of this study is to determine the effects of Tai Chi on cognitive functions and instrumental activities of daily living (ADL), and health related quality of life (HRQOL) in older Chinese adults with mild cognitive impairment (MCI) in Hong Kong.

Methodology:

The study adopts a multi-site nonequivalent control-group pretest-posttest design. The study population consists of community-dwelling older people, aged 60 or above, with MCI. The intervention group will receive training on the simplified form of Tai Chi, at frequency two lessons a week and each lesson lasts for 1 hour. The control group have no treatment regime within the study period. Outcome measures are measures on global cognitive status, instrumental ADL and HRQOL among older people with MCI.

Results and Discussion:

There is no interventional study has been conducted to investigate the effect of Tai Chi on instrumental ADL and HRQOL in older people with cognitive impairment. This article is to describe a quasi-experimental clinical trial for examining the cognitive, functional and psychosocial effect of Tai Chi training on older people with MCI.



Background:

Fall accident can causes tremendous impact for elderly residents with visual impairment. The inevitable decreases in overall physical activity during the recovery period can lead to other unfavorable consequences. Most of the fall in our elderly home were reported to be caused by intrinsic factors: lower limb weakness and poor postural balance. In order to reduce the risk of fall for our visually impaired residents, a fall prevention exercise program has been developed to provide assessment and training for our frail elderly.

Methodology:

20 visually impaired residents aged between 70 and 97 with independent mobility were recruited to participated in a 12-months exercise training program. They were engaged in a 60-minutes exercise session three times a week for lower limb muscle strengthening, endurance training, transfer training and postural balance training. Posturography and lower limb muscle strength were examined before and after the training program to evaluate the effectiveness of the program.

Results and Discussion:

According to the Romberg Test conducted to examine the effects of the training on balance, the total body sway area, the length of COP movement during the test and the velocity of body sway significantly decreased after the training program (*p<0.05). Moreover, the lower limb muscle strength significantly increased after exercise training

Conclusion:

Our results demonstrate that the 12-month exercise training program is effective at improving the lower limb muscle strength as well as postural balance of the elderly residents with visual impairment. Thus, this exercise training program can be proposed to reduce the fall risk of the visually impaired elderly.



A023 The nature of caregiver burdens of foreign domestic helpers in Hong Kong: a hermeneutic phenomenological study.

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Background:

Foreign domestic helpers (FDHs) are increasingly caring for older people in families both locally and worldwide. Traditional understandings on the caregiver burden of informal caregiver largely limited to family members, neighbors and close relatives. The contextual understanding on the nature of caregiver burden of FDHs is unclear.

Aims and objectives:

To understand the caregiver burden of FDHs in caring for older people in Hong Kong; To suggest implications for family care and research from the insights developed out of the findings.

Methodology:

Heideggerian hermeneutic phenomenology was employed as the guiding philosophy and methodology. Unstructured interviews were conducted with nine female FDHs who had at least two years of experience in caring for older people in Hong Kong. Verbatim transcripts were analyzed using the reflective method of van Manen. The framework of de Witt and Ploeg was applied for trustworthiness.

Results & Discussion:

Two themes relating to the nature of caregiver burdens of FDHs were discovered for discussion: (1) dignity holding out into undignity; and (2) receding to stay on otherwise. With the insight regarding the dominance of the being of functioning commodity, the nature of caregiver burdens of FDHs was disclosed as being the lack of possibilities of becoming other possible beings.

Conclusion:

The nature of lacking possibilities of becoming shed light to family systems nursing to develop empathy on the multiple realities of the caregiving of FDHs. The introduction of FDHs as the being of functioning commodity may complicate the family organization of families experiencing chronic illnesses. Empowering the experience of FDHs for the becoming of other possible beings may relieve their caregiver burdens.



A027 Stress and psychological well-beings in nursing students*HO M¹, WONG VSW¹, CHOW PPK¹, CHENG WLS¹¹Tung Wah College**Background:**

Stress is an important psychosocial factor in the educational process which may influence student's academic performance and well-being. This study aims to identify the sources of stress among nursing students at different stages of training and evaluate the relation between stress and the psychological wellbeing of nursing students.

Methodology:

This longitudinal study follows a cohort of nursing students of Tung Wah College (n=196) from the entry to their 5-year Bachelor program to the completion of their program. Sources and levels of stress were assessed by using a validated questionnaire, Stressors in Nursing Students Scale – Chinese Version (SINS-C) which assesses stress related to academic work, clinical work, finance and personal life. Psychological distress was measured by the Chinese version 12-item General Health Questionnaire and analysed using 2-factor model (social dysfunction and anxiety/depression). This paper reported the findings at Year 1, Year 2 (before the first clinical practicum) and year 3 (after clinical practicum).

Results and Discussion:

The response rates were 78%, 78% and 94% at Year 1, 2 and 3, respectively. 97 students provided complete data at all data collection points. Academic and personal related concerns emerged as the major sources of stress. There were significant increases in the proportions of students experiencing stress related to academic ($P<0.001$) and clinical works ($P<0.001$) from baseline to year 3. The levels of stress was highest in the period before they had the first clinical practicum. The psychological wellbeing did not change before and after the clinical practicum. However, students reported experiencing stress showed a greater degree of social dysfunction and anxiety/depression ($P<0.05$).

Conclusion:

Study on the changes in nursing student's sources and levels of stress at different stage of training will provide insights for nurse educators in developing strategies to prevent adverse effect of stress and improve academic achievements.



