

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

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

Lancelot W H Mui<sup>a</sup>, Albert Lee<sup>b\*</sup>

<sup>a</sup>*JC School of Public Health and Primary Care, The Chinese University of Hong Kong*

<sup>b</sup>*Centre for Health Education and Health Promotion, JC School of Public Health and Primary Care; and Wu Yee Sun College, The Chinese University of Hong Kong* \*Corresponding author: Professor Albert Lee ([alee@cuhk.edu.hk](mailto:alee@cuhk.edu.hk))

#### **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**

Kenneth Fong<sup>a\*</sup>, Kar-wai Tong<sup>b</sup>

<sup>a</sup>*Department of Rehabilitation Sciences, The Hong Kong Polytechnic University, Hung Hom, Hong Kong*

<sup>b</sup>*School of Continuing Education, Hong Kong Baptist University, Kowloon Tong, Hong Kong*

\*Corresponding author: Dr Kenneth Fong ([rsnkfong@polyu.edu.hk](mailto:rsnkfong@polyu.edu.hk))

#### **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**

Daisy S. M. Lee<sup>a\*</sup>, Tebby Lee<sup>b</sup>, Gary Chong<sup>b</sup>

<sup>a</sup>*School of Professional Education and Executive Development, The Hong Kong Polytechnic University, Hung Hom, Hong Kong*

<sup>b</sup>*United Christian Hospital, Kwun Tong, Hong Kong* \*Corresponding author: Dr Daisy Lee ([smdlee@speed-polyu.edu.hk](mailto:smdlee@speed-polyu.edu.hk))

#### **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**

Wai-ting Lo, Ka-lai Yeung, Pui-ling Li, Kit-lun Yick\* and Kam-ching Chan

*Institute of Textiles and Clothing, The Hong Kong Polytechnic University, HungHom, Hong Kong*

\*Corresponding author: Dr Kit-lun Yick ([kit-lun.yick@polyu.edu.hk](mailto:kit-lun.yick@polyu.edu.hk))

#### **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 bunions (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**

Shuk Fan Tong, Joanne Yip\*, Kit-lun Yick, Marcus Chun Wah Yuen

*Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Hung Hom, Hong Kong*

\*Corresponding author: Dr Joanne Yip ([tcjyip@polyu.edu.hk](mailto:tcjyip@polyu.edu.hk))

#### **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.