

Abstracts

Wednesday, 17 May 2017

Symposiums 146
S5 to S14

Special Sessions..... 164
SS4 to SS5

Masterclasses 168
M9 to M15

Parallel Sessions 180
PS5 to PS14

Corporate Scholarship Presentations 199
C1 to C3

Service Enhancement Presentations 207
F5 to F8



Symposiums

S5.1

Improving Healthcare through Innovation

09:00 Convention Hall A

An Overview of the Virtual Doctors Service in Zambia

Jones H

The Virtual Doctors, UK

The presentation will overview the background and concept of the Virtual Doctors in Zambia. Overlooking the need of support for rural health workers with supportive diagnosis and treatment advice for their patients from volunteer doctors based in the UK.

The presentation will discourse the three key aims of supporting rural health workers to treat more patients within their own communities, to help reduce unnecessary referrals to distant and hard to reach hospitals and to improve the capacity of rural healthcare workers through on-going mentorship.

We will present the challenges of providing a sophisticated service in a resource poor setting and the technology that has evolved over time to the contemporary application of smartphone technology utilising the expanding mobile broadband network in Africa for the provision of internet.

S5.2

Improving Healthcare through Innovation

09:00 Convention Hall A

Application of Simulation to Improve Clinical Efficiency – Systems Integration

Chung HS

Emergency Medicine, Yonsei University College of Medicine, Korea

Simulation-based training and assessment is playing an increasingly important role in creating competent individuals to become prepared in providing safer patient care. In addition to the focus on skill acquisition, it is important to ensure that responders are able to perform a variety of tasks in unique and challenging situations. Simulation application is not only limited to individual or team performance, but it can also be used in the area of systems integration. Simulation programmes with systems integration demonstrate consistent, planned, collaborative, integrated, and iterative application for teaching, assessment, quality, patient safety, and risk management activities to achieve excellent clinical care, enhanced patient safety, and improved outcome metrics across a healthcare system.

Simulation programmes need to demonstrate activities that are clearly driven by the strategic needs of the involved clinical facility or healthcare system(s) to achieve enterprise level goals and improve quality of care: (1) impacting integrated system improvement within a complex healthcare environment; (2) enhancement of the performance of individuals, team, and organisations; and/or (3) creating a safer healthcare delivery system and improving outcomes.

In this presentation, we will try to share how simulation programmes have been used as a resource by quality, patient safety, risk management, and/or similar organisational structure for enterprise improvement with bi-directional feedback. We will also try to describe examples of simulation activities used by the programme that facilitated quality, patient safety, risk management, enterprise improvement and/or quality outcomes projects/activities.

S6.1

Effective Utilisation of Medical Resources

09:00 Convention Hall B

Developing a Quality Framework for the Healthcare System*Keogh B**Medical Directorate, NHS England, UK*

S6.2

Healthcare Performance Measure

09:00 Convention Hall B

Measuring for Quality in Healthcare*Lew T**Medical Board, Tan Tock Seng Hospital, Singapore*

Einstein kept a sign in his office that read, "Not everything that counts can be counted, and not everything that can be counted counts."

Edwards Deming, the father of the post-Taylor industrial revolution: "It is not enough to just do your best or work hard. You must know what to work on."

These aphorisms sum up the entire *raison d'être* of a measurement framework in Healthcare. A consideration for what should reasonably be measured may encompass the following dimensions: (1) The aims of quality healthcare and what measures represent the interests of stakeholders - payers, providers, regulators. (2) The healthcare financing model in a country and what drives its sustainability? These in turn determine the strategic objectives at a system level for measurement. (3) What are the broad process and outcome measures of health from prioritised disease-specific or treatment categories and how are they benchmarked for performance and comparison. (4) What are the broad frameworks for the quality in the delivery of healthcare and how are they measured for performance? (5) How do we measure satisfaction in the healthcare system from the perspective of the citizen (population), the patient and their journey through the system? (6) How is the health industry management of productivity, efficiency and value tracked? And finally, (7) How can we link these measurements to job satisfaction, motivation, rewards and recognition to align patient and healthcare provider values?

These considerations are discussed in the context of contemporaneous challenges facing the Singapore public healthcare system and illustrated from the perspective of Tan Tock Seng Hospital, an acute and tertiary public hospital looking after the 1.5 million population of central Singapore.

Symposiums

S7.1

Geriatric Care

09:00 Convention Hall C

How to Deal with the Frail Elderly at the Hospital Front Door

Oliver D

Care Quality Improvement Department, Royal College of Physicians, UK

Population ageing has changed the nature and core business of acute hospital care. The average age of patients presenting acutely to Emergency Departments and Acute Medical Services is older, with many over 80. The highest relative cost is also for those patients. This in turn has changed the nature of acute adult care and so our services must change to reflect this. (<https://www.rcplondon.ac.uk/projects/outputs/future-hospital-commission>)

Many older people have single diseases, are in overall good health and their needs are little different to those in mid-life. However, many of those calling ambulances, presenting to the acute hospital "front door", cared for on deeper wards within the hospital, or seen in rapid access ambulatory care clinics have age-specific problems.

In particular, they are more likely to suffer from multiple long term conditions, often related to age, often accompanied by polypharmacy. They often have dementia which accompanies their other medical problems and complicates their presentation and management. Age-related disability is also prevalent as is reliance on support from family caregivers.

Of especial importance is the concept of frailty. Older people with frailty often have poor functional and homeostatic reserve (Clegg, Rockwood et al). They often present to acute care systems with syndromes such as falls, delirium, rapid loss of mobility or functional independence or non-specific failure to thrive. Even relatively minor illness or injury can precipitate such crises. Stress and concern among family caregivers is another common trigger. Some present close to the end of life. Because loss of function in the face of acute illness also complicates frailty, they often need skilled post-acute rehabilitation.

Comprehensive geriatric assessment delivered by skilled multi-disciplinary teams, including geriatricians, can improve outcomes for older people with frailty in acute care.

We need to adapt what we do to identify people with frailty more systematically, to provide effective rapid community responses in crisis and ambulatory alternatives to hospital. But when they do present acutely, expert early assessment and intervention with access to rapid community alternatives can often keep them out of hospital. And if they do come in we should do all we can to prevent complications of hospitalisation, to prevent functional decline and to return them home as soon as is safe.

References:

The Silver Book on Urgent and Emergency Care – http://www.bgs.org.uk/campaigns/silverb/silver_book_complete.pdf

Scottish Older People in Acute Care, (OPAC) project

Frailty a clinical review, Clegg, Rockwood et al Lancet – [http://thelancet.com/journals/lancet/article/PIIS0140-6736\(12\)62167-9/abstract](http://thelancet.com/journals/lancet/article/PIIS0140-6736(12)62167-9/abstract)

Future Hospital Commission – <https://www.rcplondon.ac.uk/projects/outputs/future-hospital-commission> - RCP website

S7.2

Geriatric Care

09:00 Convention Hall C

Frail Elderly Care Model in Emergency Medicine Ward, Queen Elizabeth Hospital

Wong G

Accident and Emergency Department, Queen Elizabeth Hospital, Hong Kong

The population in Hong Kong reached more than 7.3 million in 2016, and is expected to rise to 8.2 million in 2043. During the same period, the elderly population (aged over 65) rose from 16% in 2016 to 23% in 2024, and then 33% in 2044. Over the decade, Yau Tsim Mong area as well as Kowloon District experienced the largest population growth; and Wong Tai Sin district has the highest proportion of elderly population.

It is no wonder that the Accident and Emergency Department (AED) of Queen Elizabeth Hospital is experiencing increasingly heavy service demand – the highest triage categories one to three attendance, highest number of inpatients by ambulance, and most importantly highest elderly attendance by those aged 65 and above. In order to uphold the quality of care to our patients, new service and care model have been devised – Emergency Medicine Ward (EMW) is one major endeavor among the AEDs in Hong Kong. Over the years, EMW has proven to be a suitable platform for protocol-driven care plan, as well as a hub for multi-disciplinary service and cross-specialty collaboration to expedite patient management.

Frail Elderly Care Model is not new to healthcare system in other parts of the world. The opening of our second EMW by the end of year 2015 has provided opportunity for trial of this service model – Frail Elderly Service. This model incorporates multi-disciplinary team management of emergency physicians and nurse, geriatric-trained nurses, and allied health professionals. The Frailty Team will target medical problems as well as psycho-social needs of the elderly, who may be suffering from psychosomatic complaints, mobility imbalance and frequent fall, caring problems etc. The comprehensive team approach will expedite the in-hospital management with shortened length of stay and also decongest the hospital as a whole. The recruitment of a geriatrician to the Team recently will further strengthen the Team's professional expertise, enable safe discharge and divert patients to the most appropriate level and area of care in the system.

S7.3

Geriatric Care

09:00 Convention Hall C

Frailty – Implications for Urgent Care of the Older Person

Kng C

Department of Geriatrics, Ruttonjee and Tang Shiu Kin Hospitals, Hong Kong

Elderly people accounting for more than half of the emergency admissions are core business of hospitals. Thus, quality care must address the specific needs of this vulnerable population, characterised by multi-morbidity, disability and frailty. The foremost challenge is to identify those with the highest risk of adverse outcomes for individualised treatment approaches in a heterogeneous population. Increasing complex therapeutic options using a disease-centred paradigm shifts our focus of care towards treatments of conditions, rather than care of the person. This is pertinent at the advanced stage of chronic illness that compassionate comfort measures are more appropriate. Frailty is a phenotypic or biophysical state which provides a risk measure of poor health outcome. Clinically applied, this has practical implications in guiding care plan and stratifying treatment options for all healthcare professionals caring for the elderly.

This session will describe practical applications of frailty to drive improvements in delivering care to elderly in local acute settings. This includes early geriatric assessment which informs care planning in admissions avoidance and expediting discharges. It will describe initial efforts to make the patient journey, environment and care processes “frail-friendly” as countermeasures to reactive episodic care.

Symposiums

S8.1

Decision Making

09:00 Theatre 1

To Do or Not To Do: Determining Effectiveness and Appropriateness of Surgery

Harris I

Orthopaedics Department, University of New South Wales, Australia

Different methods for evaluating surgical effectiveness will be discussed, along with their relative likelihood of overestimating benefits and underestimating harms. It will be shown that the estimate of effectiveness changes according to the method of evaluation and that less biased methods are needed to improve the accuracy of surgery.

Ethical obstacles to determining exist whereby ethical approval is not required to introduce new surgical techniques yet there are considerable ethical obstacles to the evaluation of those new techniques.

Measurements of appropriateness of surgical treatments are required once effectiveness has been established, as significant practice variation exists for effective treatments, providing evidence for under- and over-treatment

New ways of evaluating the effectiveness and appropriateness of established and new surgical procedures will be discussed, including traditional randomised trials and registries, modern methods that incorporate routine practice and methods of funding will also be discussed.

S8.2

Decision Making

09:00 Theatre 1

Cognitive Biases in Clinical Decision Making

Klein J

Department of Medical Education, Melbourne Medical School, University of Melbourne, Australia

Clinicians, like all humans, can fall prey to cognitive biases. These biases can have an impact on diagnostic and treatment decisions. Two key biases that can affect clinical decision making will be discussed: the over-confidence bias and the confirmatory bias. For each bias how it can operate in clinical settings and remedies for avoiding the bias will also be discussed.

S8.3

Decision Making

09:00 Theatre 1

Informed Decision Making for Elderly*Lou V**Sau Po Centre for Ageing, The University of Hong Kong, Hong Kong*

The extended longevity in the past decades requires both professionals and families to make decisions on health and social care arrangements increasingly. From time to time, professionals including medical doctors, nurses, and social workers are expected to engage families in decision making processes by identifying needs, exploring options, and informing them health and social care options, advantages and disadvantages of each option, and potential impacts. While health belief model is widely adopted in healthcare decision-making, review of literature revealed three challenges when applying this model in informed decision making for elderly. First, the underlying assumption of the desire to avoid illness or getting well is challenged by the observation that some older adults are living with chronic conditions such as cognitive impairment. Second, experiences of families with older adults suffer from end-stage conditions question that certain actions will prevent or lessen the changes of illness. Third, literature and field observations among Chinese older adults showed a tendency of relying on children and medical doctors in the decision-making process. A cultural-sensitive model of informed decision making for elderly is urgently in need.

Symposiums

S9.1

Healthcare Performance Measure

10:45 Convention Hall B

NHS Atlases of Variation – the Power of Variation

Cripps M

NHS RightCare, NHS England, UK

NHS Atlases of Variation were the first publication that shone a light on unwarranted variation in healthcare delivery in England. Since the original publication, data and intelligence has been at the forefront of NHS RightCare's successful evolution of the concept and its work on both improving patient outcomes and delivering a sustainable national health service. The Atlases and the detailed work that followed have highlighted many scaleable, replicable opportunities for improvements in both care and value, of interest to international delegates keen to develop a similar approach based on robust evidence.

S9.2

Healthcare Performance Measure

10:45 Convention Hall B

Measuring Operating Theatre Efficiency in the Hospital Authority

Lai PBS

Department of Surgery, Prince of Wales Hospital, Hong Kong

Operating theatre service plays an important role in the provision of surgical treatment for patients in modern healthcare. Incremental improvements in operating theatre utilisation and efficiency can have major impacts on various stakeholders and resource utilisation. In operating theatres, efficient case throughput requires optimal use of time which is dependent on minimising wasted/unused time and maximising output with regards to inputs.

Operating room (OR) efficiency is a measure of how well time and resources are used for their intended purposes and specific measurements are required to assess overall functioning of operating theatres. Specific measurements include: (1) percentage of theatre utilisation; (2) start-time tardiness; (3) case cancellation rate; (4) turnover time; and (5) overrun and underrun times. Since the performance may be affected by many factors, the operating team would have to analyse the whole patient journey including pre-operative, intra-operative and post-operative management logistics.

OT metrics and key performance indicators (KPI) have been developed for data collecting, reporting and monitoring purposes. KPIs are in general derived from the strategic goals of the organisation and KPIs should drive behaviour that is consistent with the objectives and strategies of the organisation. The data will provide insights on areas that may require clinical and operational improvements and such data-driven processes will translate into improved outcomes.

Starting from the first quarter of 2017, there are two new KPIs in use for elective operating sessions in the Hospital Authority: (1) the utilisation rate of scheduled elective OT sessions; and (2) ratio of scheduled to expected elective OT sessions/hours. To achieve our strategic aim of improving efficiency, we need collegiate collaboration between surgeons, anaesthetists and OT nurses and also their understanding and buy-in of the KPIs.

S10.1

Palliative Care

10:45 Convention Hall C

End-of-life Care in Singapore*Goh-fung CR**Asia Pacific Hospice Palliative Care Network; Division of Palliative Medicine, National Cancer Centre, Singapore*

Palliative care in Singapore started from the hospice movement. In 1986, volunteers at St Joseph's Home organised themselves to provide care for patients dying in their own homes. They first joined the Singapore Cancer Society and later formed their own organisation, now known as HCA Hospice Care. From the late 1980s to 1990s, various charitable organisations provided both inpatient hospice care and hospice home care.

The Singapore Ministry of Health started giving support to these charities, known as Voluntary Welfare Organisations (VWOs) from 1990 in the form of grants, and later subventions that fund partially the services being provided. The policy then, as now, was that the government would fund acute care in hospitals, which were organised into business units wholly owned by a government holding company, but intermediate and long-term care would be provided by VWOs, licensed by the Ministry of Health. Development of these services would be guided by the various channels of funding provided by the government to accredited units.

A majority of deaths (over 60%) occur in hospitals, so currently, all government acute care hospitals have palliative care services, mostly consultative services. Step-down care in community hospitals is being ramped up, and all health clusters (currently re-organised to three) have community hospitals which have palliative care beds. This is in anticipation of the lack of caregivers to provide care at home now that families are smaller and two-income households are the norm. Hospice home care services run by VWOs continue to serve the majority of patients at home, enabling over 50% of these patients to die at home. A priority currently is the integration of palliative care into nursing homes to enable people to "age and die in place".

S10.2

Palliative Care

10:45 Convention Hall C

"Keep Me Comfort at Home" – Palliative Care Nursing Support in the Community*Kwan C**Palliative Care, Bradbury Hospice, Hong Kong*

Patients with chronic incurable diseases suffered from a number of physical and psychological distresses. When entering the end stage of life, pain, symptoms, weaknesses, impaired mobility and self-care ability make staying at home difficult. This is also a hard time for family caregivers. Even if they are capable enough to take up all the caring tasks, they would still find it very stressful to look after a terminal patient at home. Caregiver anxiety is very common and real in the caring process. Home care is an integral component of palliative service to support patients to stay at home as long as possible. Home care brings the care to the patient and avoids the burden of transportation to clinics, particularly essential for patient at the terminal stage. Palliative home care nurse plays the role of case manager, advocates for and coordinates the care of the patients. Home care nurse pays regular visits to the patients' homes or residential care units to provide holistic nursing care to the patients including symptoms management, emotional support and facilitate coping at home. Home care nurse also provides support to the family caregivers in educating caring skills, stress management and facilitate family communication. Home care nurse maintains partnership with the patients and their families. Keeping a continuous and genuine communication with them to adjust the care focus, meeting the changing needs of the patients along the disease and dying journey is vitally important. Home care nurse walks with the patients and their families in this final and difficult part of the life journey. "Keep me comfort. I want to stay at home" is very often a request of our terminal patient. This is always a challenge for palliative home care nurse to support the patients at home as their needs and home situations are so varied and individual.

Symposiums

S10.3

Palliative Care

10:45 Convention Hall C

Palliative Care Consultative Service in Acute Hospital – Impact and Challenges

Kwok AOL

Department of Medicine and Geriatrics, Caritas Medical Centre, Hong Kong

Same as all developed countries, Hong Kong is facing an aging population and increased prevalence of chronic disease burden. Palliative care has received growing attention and recognition from patients, families and healthcare professionals all over the world. Palliative care is not only relevant in end-of-life, instead the service should be integrated and offered throughout the disease trajectory. One of the challenges for palliative care is the high prevalence of conditions that need palliative care. In order to improve the accessibility and quality of palliative care, it is important to integrate palliative care into care pathway through shared care model according to patients' need and collaborate between palliative care specialist and non-palliative care specialist.

Palliative Care Consultative Service in acute hospital is one of the important components in the shared care model. Palliative Care Consultative Team was rapidly developed in different countries in recent five to ten years as it showed to improve patient and family satisfaction, decrease costs of care and decrease healthcare utilisation. Local data also showed that the service can improve the accessibility of palliative care, improve symptoms control, facilitate early discharge to community, triage high complex palliative care needs patients and shorten waiting time to inpatient palliative care unit. The scope of service of the consultative team includes symptoms control, discussion of diagnosis and prognosis, advance care planning, discussion of goal of care, psychosocial and spiritual support of patient and family, discharge planning, care for imminently dying patients, and bereavement care.

S11.1 Staff Engagement and Collaboration**13:15 Theatre 1****Great Things Always Begin from Inside***Wong JCC**Stelux Holdings International Limited, Hong Kong*

Staff engagement and teamwork are indispensable factors to service improvement. These factors also contribute to organisational and individual performance, productivity and well-being. A workplace focused on “more, bigger, faster” can make you feel less engaged, less creative and less thoughtful. How can we stay positive and prevent these unfavourable factors from impacting the workplace? And how can we nurture and inspire teamwork, staff engagement and service improvement?

Organisations must create a space where people feel important and, consequently, can help their “customers” feel important. Imagine staff who are self-motivated and inspired to produce long-term sustainable growth for both themselves and the business. Building positive relationships with staff are important in long run.

Instead of using management jargon, the speaker is going to share how his simple philosophy on “Art” of management can help improving staff engagement and teamwork, so as to achieve service improvement and long-term sustainable results.

Great things always begin from “Inside”.

A case study on Optical 88 will be shared at this symposium. This session will be conducted in Cantonese, supplemented with English terms.

S11.2 Staff Engagement and Collaboration**13:15 Theatre 1****The Six Senses – Communications in the Digital Era***Chong Q**CLP Power Hong Kong Limited, Hong Kong*

In digital land, people interact through social media. With today’s ubiquitous connectivity, the power of social media is phenomenal. How good you are in leveraging social media to connect with your stakeholders in a fun and engaging manner, both internally and externally, can hold the key of success to your business. To do so, a creative mind is essential.

Right-brainers are naturally able to pull together disparate ideas and think creatively, and capture emerging business opportunities. One of the theories tries to effectively apply the six human senses – Design, Story, Symphony, Empathy, Play and Meaning – in engaging with customer and community. It helps to make the engagement in a more exciting and meaningful way.

CLP Power operates a vertically integrated power supply business in Hong Kong, serving 80% of Hong Kong’s population for over a century. With growing concerns about climate change and environmental conservation, how can the utility change their way of engagement with their customers and communities and how to do it effectively?

Employee engagement is equally important for any service improvement, cultural change and communications campaigns to be successful.

Symposiums

S11.3**Staff Engagement and Collaboration****13:15 Theatre 1****Staff and Patient Engagement from the Eyes of Patients***Leung KP**Internal Affair Committee, The Hong Kong Alliance of Patients' Organisations, Hong Kong*

As a professional teacher and an educated patient, the speaker will share with the audience his experience in enhancing teacher-student engagement by motivating student to participate actively in their studies. He will try to apply this experience to staff-patient engagement in the medical profession by utilising various levels of the three domains, namely Cognitive, Affective and Psycho-motor, of Bloom's Taxonomy to the whole treatment process from initial consultation, examination, medication, operation, to rehabilitation with empathy.

S12.1 Inter-professional Collaboration**14:30 Convention Hall A****Health Service Accreditation Programmes: Their Role, Contribution and Associated Challenges to Driving Quality, Safety and Organisational Improvement***Greenfield D**Australian Institute of Health Service Management, University of Tasmania, Australia*

This presentation has three aims: to review health service accreditation programmes role, contribution and associated challenges, to driving quality, safety and organisational improvement. First, the purpose of health service accreditation programmes will be discussed. An accreditation programme is a mechanism to assess that an organisation has appropriate structures and processes to promote safety and quality, that they are functioning effectively, and have a continuous quality improvement focus to drive improvements. The accreditation of healthcare services remains a key regulatory mechanism employed by many governments, at both national and state levels, to monitor and improve safety and quality.

We will review how accreditation programmes provide a framework for engagement and improvement across complex healthcare organisations. We will review the literature to see how accreditation programmes have: stimulated improvements in communication and cooperation among individuals and teams; encouraged and made transparent collegial decision-making and team learning; realised the regular review and standardising of policies and guidelines; endorsed positive organisational cultures and leadership; promoted a positive quality and safety culture, thereby promoting practice change; and, been associated with improvements in clinical performance.

Nevertheless, there is still much to learn about under what circumstances and how an accreditation programme fosters quality improvement and learning. Clarifying the distinction between the costs associated with implementing safety and quality systems, and those with participation in an accreditation programme requires further attention. The difference is confused by many and results in false claims about the cost of accreditation activities. Understanding the role of process and quality indicators within an accreditation programme or their relationship to accreditation results is required. Another significant challenge is the sustainability of the current programme model and the need for further evolution of the component parts, including standards and surveyor workforces. These are perennial issues, inherent in the accreditation field, that necessitates consideration.

S12.2 Inter-professional Collaboration**14:30 Convention Hall A****Inter-professional Collaboration in the Community***Chan F**Department of Medicine and Geriatrics, Tung Wah Group of Hospitals Fung Yiu King Hospital, Hong Kong*

In the past, healthcare services are mainly provided by the hospitals and outpatient clinics led by the medical team. Over the years, community care services, including community nursing service, community geriatric assessment service, outreach psycho-geriatric service, palliative care service, and domiciliary allied health services have been set up. The ultimate goal is to provide an integrated, holistic, patient-centred and multi-disciplinary care for older patients with chronic diseases to stay in the community, supported by healthcare professionals, family members as well as the social and welfare sector.

In this symposium, various inter-professional collaboration models will be presented. Integrated care model and patient support call centre are two programmes targeted at high risk elders to provide continuing comprehensive support upon their discharge from hospital. Community volunteer service is a medical-social collaboration with different community partners to provide support and care in the form of a neighbourhood network. End-of-life care programme is an inter-specialty programme in partnership with palliative care specialists for older adults with advanced diseases and limited life expectancy, promoting advance care planning and quality care in residential care homes for the elderly. Dementia community support scheme and carers' training programmes are designed to provide support for older persons with mild to moderate dementia in district elderly community centres operated by non-government organisations. A recently rolled out pilot programme, aiming at improving drug adherence and minimising drug wastage for patients with asthma and chronic obstructive airway disease, is an inter-professional collaboration, involving pharmacists, respiratory physicians, social workers, community nurses and volunteers.

At the end of the presentation, key factors for successful implementation of inter-professional collaboration will be discussed.

Symposiums

S12.3

Inter-professional Collaboration

14:30 Convention Hall A

Inter-professional Collaboration on Lean Improvement Programmes

Lai PBS

Department of Surgery, Prince of Wales Hospital, Hong Kong

The multi-disciplinary approach is an essential element in quality healthcare. In this team-based service delivery, we have to ensure the right people with the right skills and competences are caring for patients and performing various tasks.

The core idea of “lean” in healthcare is to maximise patient value while minimising wastes. WISER (acronym for “We Innovate, Service Excels Regularly”) is a movement to streamline work processes and achieve staff engagement with the help of lean tools. Healthcare teams can re-design or refine the care processes that are clogged up by wastes and achieve improvement in quality and safety as well as staff morale, reduction of turn-around time and cost; and increase in efficiency and productivity.

The healthcare team can change the workplace culture by understanding the elements and the underlying lean philosophy so as to implement it through alignment of “Purpose, Process and People” (The 3Ps). Among the 3Ps, perhaps “People” would be the most relevant for healthcare because healthcare is, at its heart, a service delivered by healthcare professionals. Success of lean transformation counts on engagement and collaboration of members of different professions in the healthcare team, as well as their willingness and ability to tackle complex clinical problems together.

Healthcare teams can develop a culture of continuous improvement through training, engagement and implementing the Plan, Do, Check, Act (PDCA) cycles. Examples of lean projects (which include initiatives to improve the consultation flow of the specialist outpatient clinic, re-design of workflow in the acute surgical wards to facilitate discharge) would be used to illustrate how the inter-professional collaborations could lead to reduction of wastes and improvement in quality of healthcare processes which is translated into higher care of value for patient.

S13.1

Cultural Diversity

14:30 Convention Hall B

Culture and Mental Health*Bhugra D**Health Service and Population Research, Institute of Psychiatry, Psychology and Neuroscience, King's College, London, UK*

Culture is at the core of our being and functioning, influencing the way we think and the way we behave. Culture also dictates what deviance is and how it is defined; it influences the way illnesses are identified and presented and how therapeutic alliances are built. Cultural epidemiology looks at different rates of various mental illnesses across the globe and these differences may be partly due to culture-specific patho-protective and pathogenic factors. Cultural competence is about good clinical practice, where patients and their experiences are at the heart of all therapeutic interactions. Some conditions, such as depression, are under-diagnosed in primary care all over the globe. There are many reasons for these variations, which can be related to true differentials in prevalence rates but are also related to different explanatory models by patients and their families. In therapeutic encounters these differences between patient and doctor, linguistic barriers and variations in presentation can make a significant difference to clinical engagement. Such problems may also exist in secondary mental healthcare services. Help-seeking behaviour also remains a problem, as cultures dictate what is normal and what is abnormal. In addition, explanatory models are related to stigma associated with mental illness and to differing illness beliefs. Psychiatric symptoms may be misdiagnosed in a number of ways as, for example, with somatic symptoms and cultural idioms of distress in any culture. Cultural variations in response to medication and issues related to compliance are obstacles in the pharmacological treatment of psychiatric illnesses. A novel approach to psychotherapy is also required, as cultures can be socio-centric where the self is kinship based. Strategies such as the use of trained interpreters, raising awareness, improved communication, a culturally sensitive approach to clinical practice, and various tools and models can help in the diagnosis and management of psychiatric illnesses across cultures.

Symposiums

S13.2

Cultural Diversity

14:30 Convention Hall B

Ethnic Minorities' Health in Hong Kong within its Cultural Diversity

Gurung S

United Christian Nethersole Community Health Service, Hong Kong

Introduction

Hong Kong is a developed city with excellent health indicators for the general population. However, many from the ethnic minority community which accounts for 6.4% of the total population, such as the South Asian community, are not receiving full benefits of the system as a result of different barriers in accessing healthcare service such as language and culture. Thus they tend to fall through the healthcare safety net that leads to ignorance of basic health issues. Furthermore there is a paucity of local study regarding health issues of this population, though high prevalence of obesity, hypertension and diabetes mellitus is reported in overseas studies amongst similar population.

Objectives

(1) To improve lifestyle, reduce the risk of chronic diseases particularly hypertension, diabetes and cardiovascular disease among ethnic minorities; and (2) to empower ethnic minority community with health knowledge and raise their self-esteem, as health is a resource for everyday life.

Service Provision Methods

- (1) Extensive collaboration with various agencies focusing on health promotion, evaluation, interventions, disseminating of information on good health initiatives and practices.
- (2) Training people to engage in healthcare activities and mobilising the community to involve in all aspects of health activities through various channels of promotions and campaigns.
- (3) Healthcare professional with public health training are involved in provision of service.

Key Lessons

- (1) There are still many ethnic minorities in Hong Kong, who ignore their own health and the services available in Hong Kong.
- (2) Culturally sensitive health activities are important while approaching this community.
- (3) Collaboration and support from organisations, community groups, religious affiliations, healthcare professionals and the community themselves are vital.
- (4) Professional input is vital in evaluating and gaining trust from the community.

Discussion

The impact of sociocultural factors, ethnicity, and limited language proficiency on healthcare is increasingly important in the delivery of quality healthcare as it influences a patient's perspectives, values, beliefs, and behaviours regarding health and well-being. These factors give rise to variation in recognition of symptoms, thresholds for seeking care, comprehension of management strategies, expectations of care and adherence to preventive measures.

Culturally sensitive health intervention can enhance practice of healthy behaviour and health screening. Pure screening is insufficient. Screening must be followed-up by proper medical case management/treatment/referral and have a comprehensive reminder and recall system as an ongoing sustainable programme to reduce the incidence of chronic disease in this community.

Conclusion

Ethnic minorities are often undeterred by the generalised health service. There is a need to address the cultural need while providing healthcare service amongst this community and making Hong Kong a far more accepting society which embraces diversity to live up to its brand as a "World City".

S13.3

Cultural Diversity

14:30 Convention Hall B

We All Come from Somewhere – Our Experience with Cultural Diversity*Ong KL**Department of Accident and Emergency, Tuen Mun Hospital and Pok Oi Hospital, Hong Kong*

Based on the data from 2011 Population Census, people of ethnic minority (EM) constituted 6.4% of Hong Kong's population. Limited proficiency in local languages, lower educational level or sometimes even illiteracy together with different cultural beliefs and customs inevitably affect their integration to the community, health maintenance, as well as appropriate utilisation of healthcare services.

Although EM patients accounts for only a small fraction of the overall attendance and admission to the public hospitals in Hong Kong, certain hospitals have higher percentage of EM patients as people of ethnic minority tend to cluster in certain geographical regions. The Accident and Emergency Department (AED) of Pok Oi Hospital (POH) and Tuen Mun Hospital (TMH) have been handling a proportionately high percentage of EM patients. In 2013/14, about 8% of overall POH AED attendance was from EM patients whose mother language is neither Chinese nor English, while the figure for TMH AED was 3%.

These groups of patients pose many challenges to our frontline healthcare workers, especially the barriers in communication as a significant proportion speak neither Chinese nor English. Communication barriers pose potential risks and need to be addressed. The differences in cultural and religion background require much effort for both patients and our healthcare workers to understand and overcome. One's culture and religion is often the foundation of one's behaviour and concern; and it may lead to failure of comprehending and managing the differences of another culture, leading to frustrations and misunderstandings between different parties. Understanding these differences and taking measures to overcome them will help us in our provision of healthcare services to these EM patients.

It is important to address these potential issues when managing EM patients. With our initiatives, we hope to narrow the gap between different parties.

Symposiums

S14.1

Managing Increased Healthcare Service Demands

14:30 Convention Hall C

System Engineering in Healthcare Operations Management

Long D

Department of Systems Engineering and Engineering Management, The Chinese University of Hong Kong, Hong Kong

To meet the increasing demand in healthcare, it is obviously desirable to build more facilities and train more medical staff to increase the capacity of service. On the other hand, it is also of great importance to enhance the utilisation efficiency of existing capacity. This presentation focuses on the latter, i.e., how to reduce the waste of healthcare service by using tools from operations research. Being highly scarce, some healthcare resources are regrettably and inevitably under-utilised for various reasons, such as the ubiquitous uncertainties in the system (e.g., uncertain consultation time). In this presentation, by several examples, we demonstrate how the operations research tools can be employed to improve the efficiency of the healthcare operations.

S14.2

Managing Increased Healthcare Service Demands

14:30 Convention Hall C

The Multiple Facets of Healthcare: How Would Practitioners of Science, Systems Design and Management Fulfil Their Roles in the Future of Healthcare

Lew T

Medical Board, Tan Tock Seng Hospital, Singapore

Purpose and calling remains a unifying foundation for healthcare practitioners. In a heterogenous and multigenerational workforce, a unifying vision and mission, predicated on a common ethos and value system remains a hallmark of organisations that can transcend sectoral or divergent interests. Beyond this unifying rally call, an effective and responsive structure is critical for organisational excellence and engagement. Theories centred around intrinsic motivation have proven to be effective in getting the best out of our workforce. In recent years, we have seen how radical change and disruption have affected healthcare institutions tremendously. There are several change paradigms that resonate well with healthcare providers: quality and safety, the value proposition; and innovation and the advancement of biomedical science. Clearly, the ability to see the challenges of healthcare from a broad perspective is helpful – how do we prepare the workforce for this? There are clearly many models for adoption. Our experience with an open and engaging leadership model, partnered in a learning organisation framework with a strong culture of quality and improvement has helped to foster an environment that enables change to be managed effectively at the global level.

These considerations are discussed in the context of contemporaneous challenges facing the Singapore public healthcare system and illustrated from the perspective of Tan Tock Seng Hospital, an acute and tertiary public hospital looking after the 1.5 million population of central Singapore.

S14.3

Managing Increased Healthcare Service Demands

14:30 Convention Hall C

Trans-disciplinary Care in Geriatric Surgery*Tan KY**Department of General Surgery, Khoo Teck Puat Hospital, Singapore*

Delivering comprehensive surgical care increasingly requires well-coordinated sub-specialty and allied healthcare. The current set-up of multi-disciplinary care may no longer be effective. This presentation will explore the pitfalls of multi-disciplinary care. Trans-disciplinary care is an evolution of multi-disciplinary care that aims to address some of the deficiencies of current management models. Through this change in the model of care one may better negotiate the complexities of elderly surgical care through holistic management of socioeconomic, functional and health status while mitigating co-morbidities, frailty and ensuring good functional recovery. This model builds on existing models but involves reorganisation in administrative, organisational and individual functions. Care must be individualised and gone beyond traditional treatments and outcome measures. Through this we have managed to decrease post-operative complications by more than 50% and reduce ward stay at Khoo Teck Puat Hospital.

Special Sessions

SS4.1

Recent Advances in Acute Ischaemic Stroke Management

09:00 Theatre 2

Recent Advances in Acute Ischaemic Stroke Management

Tse MMY

Department of Medicine, Queen Mary Hospital, Hong Kong

Three most important evidence-based new advances in acute ischaemic stroke (AIS) management include: (1) introduction of stroke unit; (2) the use of intravenous (IV) thrombolysis; and (3) intra-arterial (IA) mechanical thrombectomy in eligible patients. Efficacy of IV recombinant tissue plasminogen activator (rtPA) in treating patients with AIS presented within three hours from onset was first proven in 1995. Over the following 20 plus years, this practice changing evidence leads to significant changes in hospital systems especially in the emergency work flow logistic; all aim to facilitate its delivery and to shorten the door to needle (DTN) time. Percentage of AIS patients benefited from IV thrombolysis has increased steadily from about 2% to over 15% in some countries. These are the results of enhanced hospital work flow logistics and relaxation of various non evidence-based restrictions on IV rtPA use.

Despite these efforts, there are various restrictions on IV rtPA use and its efficacy in treating patients with large vessel occlusion (LVO) is generally poor. Only about 10% of patients with ICA and 20% to 30% with proximal middle cerebral artery occlusion responded favourably with IV therapy. IA mechanical thrombectomy is targeted to improve clinical outcome in this subgroup of patients. Evidence in 2015 strongly supported endovascular therapy in treating this subgroup of patients. Meta-analysis of the five most recently published randomised control trials showed that IA therapy has an absolute benefit of 20% over IV therapy alone. The average number needed to treat is five for one patient to achieve functional independence. In response to these overwhelming bodies of evidence, the US and EU have updated its AIS management guidelines that advocating IA therapy should be offered to eligible patients with LVO and appropriate measures should be taken to optimise current hospital pathway so that IA therapy can be delivered promptly.

SS4.2

Recent Advances in Acute Ischaemic Stroke Management

09:00 Theatre 2

Mechanical Thrombectomy in Acute Stroke – Radiologist's Perspective

Lee R

Department of Radiology, Queen Mary Hospital, Hong Kong

Intra-arterial thrombectomy is currently an option for treatment of acute ischemic stroke within six hours of symptom onset (Class 1; Level A). How to implement this service is indeed a great challenge.

Who should lead the team? Who should perform the procedure? Drip and ship to comprehensive stroke centre or treated in the hospital where patient admitted? Posterior circulation ischaemic stroke? In-hospital stroke? Computed tomography on brain, angiography alone or do we need additional imaging modalities? General anaesthesia or monitoring anaesthetic care? Should we treat in octogenarian? Hardware arrangement?

SS4.3

Recent Advances in Acute Ischaemic Stroke Management

09:00 Theatre 2

Mechanical Thrombectomy in Acute Ischaemic Stroke – Hong Kong and Shenzhen Experience*Ho W**Department of Neurosurgery, Queen Mary Hospital, Hong Kong*

Ischaemic stroke is a major cause of morbidity in Hong Kong, often affecting the young adult population. While intravenous tissue plasminogen activator (IV tPA) is proven effective in the treatment of acute stroke, only 8% of patients with major cerebral vessel occlusions will benefit from it.

Mechanical thrombectomy involves locating the site of major cerebral artery occlusion by computed tomography angiography or digital subtraction angiography, followed by direct delivery of aspiration device or clot retrieval device to the site of occlusion. Because of the mechanical nature of this treatment, the occluded vessel can be recannulised in a matter of minutes. This is in contrast to tPA given locally or systemically which take hours to gradually dissolve the blood clot.

In 2015, there were five randomised control trials demonstrating the benefit of mechanical thrombectomy in patients with large vessel occlusion strokes compared to medical therapy alone. Nowadays endovascular treatment has become the standard of care in ischaemic stroke involving large vessels.

At Queen Mary Hospital, we started mechanical thrombectomy from 2009 and provided regular 24-hour mechanical thrombectomy service since October 2014. We adopted a team approach consisting of neurologist, neuro-interventional radiologist and neurosurgeon. So far we have treated 35 patients with reperfusion rate of 82% and good clinical outcomes of modified rankin score of 0-2 in 35% of patients.

At The University of Hong Kong, Shenzhen Hospital we also started regular 24-hour mechanical thrombectomy in October 2014. 16 patients with major vessel occlusion were treated by mechanical thrombectomy so far. A reperfusion rate of 75% and good clinical outcomes in 38% of patients were achieved.

The medical system, doctor's attitude, culture and patient's expectations between Hong Kong and Shenzhen are vastly different. There are advantages and shortcomings in each system. By getting involved in both systems, we hope to work out an efficient and cost effective way to further benefit our patients.

Special Sessions

SS5.1

Social Hygiene Service – a Crossover of Clinical Service and Public Health

10:45 Theatre 2

Social Hygiene Clinic as a Sentinel for Monitoring of Antimicrobial Resistance – the Story of *Neisseria Gonorrhoeae*

Kwan CK

Social Hygiene Service, Department of Health, The Government of the Hong Kong Special Administrative Region

Gonorrhoea, caused by bacterium *Neisseria gonorrhoeae* (NG), is one of the commonest sexually transmitted infection (STI) in Hong Kong. If left untreated, it can be fatal due to disseminated infection. Moreover, the antimicrobial resistance in NG is increasing drastically and globally. By reviewing its historical perspective on antibiotic resistance, it was well-known that antibiotic resistance in NG was developed around every 10 to 20 years and pushing us to change the treatment regime.

Nowadays, extended spectrum of cephalosporins particularly ceftriaxone is the backbone for treatment of NG. However, high level resistance of ceftriaxone is developing among *Neisseria gonorrhoeae* which is not only threatening to Hong Kong but also around the globe.

In order to reduce the emergence of ceftriaxone resistance, Social Hygiene Clinic, the only major public institute providing STI services in Hong Kong, has implemented several important measures. These include on-site diagnosis of gonorrhoea, provision of simple and effective treatment immediately at the clinic once the diagnosis of gonorrhoea is confirmed. Moreover, “test of cure” is arranged for the index patients to ensure gonorrhoea is completely cured. Furthermore, a special team of nursing staff is formed and responsible for tracing the index patients for “test of cure” and contact tracing of partners of the index patients. Counselling and education are also provided to emphasise on the importance of treatment compliance and safe sex. Together with the laboratory support by measuring MIC of ceftriaxone and genetic sequencing of the resistant genes, Social Hygiene Clinic is working in the front-line to battle the war of NG resistance.

SS5.2

Social Hygiene Service – a Crossover of Clinical Service and Public Health

10:45 Theatre 2

Pilot HPV Vaccination Programme to the Underprivileged Girls in Hong Kong

Fan S

The Family Planning Association of Hong Kong, Hong Kong

Cervical cancer is the eighth most common female cancer and the eighth leading cause of cancer death in Hong Kong. It is caused by certain high-risk types of Human Papillomavirus (HPV). HPV infection can be prevented by vaccination, which is recommended for girls starting from the age of nine. A three-year pilot scheme providing free cervical cancer vaccination to teenage girls from low-income families was launched in October 2016 by the Family Planning Association of Hong Kong (FPAHK), and funded by the Community Care Fund (CCF). It aims to serve about 31,000 girls at FPAHK's three Youth Health Care Centres in Wan Chai, Mong Kok and Kwai Fong. Apart from providing HPV vaccination, the Scheme will also carry out publicity and education to enhance understanding among parents and teenage girls about cervical cancer and its prevention, and encourage parents to seek early vaccination to protect the health of their daughters. Scheme planning and implementation involved intensive and close collaboration among the Food and Health Bureau of the Hong Kong SAR Government, the donor (CCF), the Department of Health, and FPAHK. Support from schools, mass media and welfare organisations was indispensable. The heavy workload posed challenges to FPAHK's managerial skill as well as service capacity. This presentation will share the experience and highlight the strategies used to meet the challenges.

SS5.3

Social Hygiene Service – a Crossover of Clinical Service and Public Health

10:45 Theatre 2

Social Hygiene Clinic – a Platform for Sexually Transmitted Infection Control and Prevention

Wong ASC

Social Hygiene Service, Centre for Health Protection, Department of Health, The Government of the Hong Kong Special Administrative Region

Sexually transmitted infections (STIs) including HIV are among the most widespread and harmful infectious diseases, exacting substantial social and economic burden on families and communities worldwide. They remain to be important causes of morbidity and mortality due to common complications (WHO, 2014). In Hong Kong, about 12,000 reported STIs diagnosed in Social Hygiene Service (SHS) annually include syphilis, gonorrhoea, non-gonococcal urethritis/non-specific genital infection (of which the most common pathogen identified as chlamydia trachomatis), genital wart and herpes genitalis. Sexual contact is the major mode of transmission.

The SHS under the Public Health Services Branch of the Centre for Health Protection (CHP) of the Department of Health (DH) is responsible for the management, prevention and control of sexually transmitted diseases (STD). Services of SHS include providing diagnostic assessment, treatment and care; promoting health and preventing STD through individual health counselling and other health education activities and tracing contacts for investigation and defaulters for treatment and follow-up.

The SHS undertakes the mission to strengthen STI prevention and control in Hong Kong. Particular strategies are taken to develop and uphold standards in STI management and introduce measures to curb the spread of STI. Local STD programme is composed of two complementary components: clinical and public health programme. The aims of clinical programme are to deliver high quality clinical management to people with STIs via outpatient clinics throughout the territory and to maintain a framework on which builds the public health programme through minimal hindrance to access to care by people exposed to the risk of STIs, provision of high standard medical treatment to STIs, appropriate counselling, and with good support rendered by the Public Health Laboratory Service Branch of CHP. For the public health programme, its aims are to monitor epidemiology of STIs, and develop and conduct preventive interventions by means of continual clinic-based STI and behavioural surveillance, time honoured contact and defaulter tracing system, outreach health promotion, professional support to private sector and continuing medical education to medical professionals, partnership with other stakeholders in STI/HIV prevention.

Effective STI control and prevention relies on relevant behavioural risk assessment, accurate diagnosis, prompt and effective treatment, health and safer sex education, contact tracing and appropriate follow-up. The SHS offers a user-friendly, easily accessible and comprehensive service in STI control and prevention to the community.

Masterclasses

M9.1
Advances in Colorectal Cancer Management
09:00 Room 221

Colorectal Cancer Screening in Hong Kong

Ng S

Department of Surgery, The Chinese University of Hong Kong, Hong Kong

Colorectal cancer (CRC) has become the most common cancer in Hong Kong, and is also the second leading cause of cancer deaths. Many studies have proven that early screening can result in a remarkable reduction in CRC incidence and mortality. According to the Asia Pacific Consensus Recommendations on CRC Screening, subjects aged 50 to 75 years in both genders are the targets for CRC screening, and faecal occult blood tests (guaiac-based and immunochemical tests), as well as colonoscopy are the recommended screening tools. The Hong Kong SAR Government's Cancer Expert Working Group on Cancer Prevention and Screening also recommends that individuals aged 50 to 75 years should consider CRC screening by various modalities. Supported by the Hong Kong Jockey Club Charities Trust, The Chinese University of Hong Kong Jockey Club Bowel Cancer Education Centre launched a territory-wide CRC screening programme in May 2008. As of December 2012, the Centre had conducted CRC screenings (with faecal tests and/or colonoscopy) for over 10,000 eligible participants aged 50 to 70 without any symptoms of CRC. Among participants who had undergone colonoscopy, up to 30% were found to have pre-cancerous lesions or CRC in the large bowel. In September 2016, the Hong Kong SAR Government launched a three-year population-based CRC Screening Pilot Programme to subsidise individuals aged 61 to 70 to undergo CRC screening using faecal immunochemical test followed by colonoscopy. The aims of the pilot programme are (1) to determine the ability of the healthcare infrastructure in Hong Kong to handle the increasing demand for assessment and follow-up treatment of cancer and pre-cancerous conditions; (2) to assess public understanding, perception, and acceptance of CRC screening; and (3) to devise a screening algorithm with assured quality which is most suited to local needs and circumstances.

M9.2
Advances in Colorectal Cancer Management
09:00 Room 221

Advance Endoscopic Intervention for Colonic Lesions

Chan PT

Department of Surgery, Queen Elizabeth Hospital, Hong Kong

Colonoscopy is one of the most common investigations of the lower gastrointestinal tract. It is used as a diagnostic tool to detect benign and malignant lesions, as well as a channel for therapeutic intervention. In addition to conventional endoscopic mucosal resection (EMR) for removing polyps, endoscopic submucosal dissection (ESD) is a new trend to treat large benign polyp or early malignant lesion.

En bloc resection by ESD helps to assess the resection margin of the lesion. It decreases the local recurrence when comparing with EMR. In certain early cancer cases, complete removal of lesion can avoid further colectomy. Paris Classification, Kudo Classification and NBI Capillary Pattern can help us to select suitable patient for endoscopic submucosal dissection while chromoendoscopy can give additional information.

ESD can be performed safely in endoscopic centre with intravenous sedation without the need of general anaesthesia by trained doctors and nurses. Preparation of the patients includes diet restriction, bowel preparation, antibiotics, sedatives and antispasmodic agents. Preparation of equipment includes water jet endoscope, CO2 insufflation, Hyaluronic acid, endoscopic instruments like injector, dissector, coagulation grasper and haemostatic clips. Patients would resume diet progressively post-operation and can be discharged in a few days. Common complications include bleeding and perforation.

With the launch of colorectal screening, more large benign polyps or early malignant lesion would be found and more patients would be expected to require this service.

M9.3

Advances in Colorectal Cancer Management

09:00 Room 221

Cancer Case Manager Programme (Colorectal)

Pang YK

Department of Surgery, Queen Elizabeth Hospital, Hong Kong

Cancer Case Manager (CCM) Programme was endorsed as a new service caring model for cancer patients in Hospital Authority (HA). There is a patient-centred framework for quality cancer care delivery, which includes cancer case managers working within multi-disciplinary teams (MDTs), and an integrated clinical information sharing platform in the Clinical Management Systems (CMS) of HA. Service workflow on breast and colorectal cancer was developed and rolled out in seven clusters. In line with HA's strategic service plan, Queen Elizabeth Hospital/Kowloon Central Cluster has joined this programme and started the service in November 2011. A nurse, the CCM of colorectal cancer serves as patients' advocates and acts as a contact point to follow-up patients during the treatment journey by streamlining care pathway and logistic issues; coordinating the MDTs; and addressing patients' needs for education, psychosocial support and access to resources. These are aimed at achieving quality and cost-effective interventions and outcomes. Evaluation on quality of life and patient satisfaction survey had been conducted with encouraging results and feedback. Enhancement of this programme or extension to other diseases may be indicated for further discussion.

Reference

Central Oncology Committee Integrated Care Programs Department, Hospital Authority Head Office. (2011). Cancer Case Manager Program Operation Manual, August 2011.

M9.4

Advances in Colorectal Cancer Management

09:00 Room 221

Robotic Surgery Service

Law WL

Department of Surgery, The University of Hong Kong, Hong Kong

In the recent two to three decades, we have witnessed rapid advances in minimally invasive surgery in the treatment of colorectal cancer. Significant improvement in postoperative recovery without compromising the oncologic outcome has been achieved. In Hong Kong, there is a wide application of minimally invasive surgery for colorectal cancer and over 60% of colorectal resections are performed using laparoscopic approach in Hospital Authority (HA) hospitals.

However, rectal cancer surgery is a challenging procedure and the quality of the operation has significant impact on the oncologic outcomes. The laparoscopic approach is possible but this is a complex operation with a steep learning curve. This results in a high conversion rate and a suboptimal specimen in laparoscopic resection.

Robotic assisted surgery has been demonstrated to overcome some limitations of conventional laparoscopic rectal cancer surgery. The stable platform with 3D vision together with versatile instruments, which possess 7 degrees of freedom of movement, make robotic-assisted surgery very suitable for pelvic dissection.

Robotic surgery has been increasingly applied to rectal cancer surgery and favourable results have been reported worldwide. In Hong Kong, robotic rectal cancer surgery began more than 10 years ago and now it is commonly applied in hospitals which have the surgical robotic system. A credentialing system for the surgeons has also been developed in the HA.

We have performed over 300 cases in Queen Mary Hospital and favourable results have been achieved. Robotic rectal surgery is associated with low conversion rate and confers the benefit of better autonomic nerve preservation. The rate of positive circumferential margin is also low. Moreover, the procedure is associated a short learning curve for young novice surgeons. The long-term survival is comparable to laparoscopic resection. More complex procedures can be performed with the surgical robotic system.

Masterclasses

M10.1

Palliative and/or End-of-life Care for Patients with Advanced Chronic Obstructive Pulmonary Disease

09:00 Room 428

Overall Perspective and Scientific Basis of Palliative Care in Patients with Advanced Chronic Obstructive Pulmonary Disease

Lau KS

Integrated Medical Service, Ruttonjee and Tang Shiu Kin Hospitals, Hong Kong

Chronic lower respiratory diseases were the sixth leading cause of death in Hong Kong in recent years. Patients with advanced chronic obstructive pulmonary disease (COPD) suffer from significant symptoms and impaired quality of life (QOL). An early study showed that patients with advanced COPD had worse QOL than patients with advanced lung cancer (Gore, 2000); and similar findings were reported in recent study (Javadzadeh, 2015).

A holistic approach is required for care of patients with advanced COPD so as to address disease management; minimise physical, psychosocial and spiritual distress; maximise QOL via rehabilitation and palliation; and care for their end-of-life journey. Recent international guidelines on COPD have included palliation and care at the end-of-life, which is an integral component of care for patients with advanced COPD (GOLD guideline, 2017). Inclusion criteria for palliative care in patients with advanced COPD are reported by various respiratory and palliative care professional bodies.

Canadian guideline on dyspnoea in patients with advanced COPD (CTS 2011) and experts (Mularski and Rocker, 2015) recently recommended a triple approach on dyspnea in advanced COPD: (1) disease management; (2) non-pharmacological management of dyspnoea; and (3) pharmacological management of dyspnea by using opioids.

On the aspect of disease management, patients with advanced COPD are classified to the Group D of GOLD guideline. An updated GOLD guideline 2017 recommends the use of triple inhaled therapy (LAMA + LABA + ICS), plus options of roflumilast and macrolide in Group D patients.

Non-pharmacological managements on dyspnoea were reviewed by Cochrane review (2011). The positive result of the combination of non-pharmacological treatments was reported by a random control trial (RCT) on an integrated palliative and respiratory care service of Breathlessness Support Service (BSS) for patients with advanced disease and refractory breathlessness (Higginson, 2014). Cost-effectiveness of a Breathlessness Intervention Service (BIS) was supported by an RCT (Farquhar, 2016).

Pharmacological treatment of opioids on dyspnea was recently reviewed by Ekstrom (2015) and Cochrane (2016). The main findings are that opioids reduced breathlessness in COPD with the strongest evidence for systemic therapy, whereas there were no effects on exercise capacity. No serious adverse effects related to opioids were reported in any study, including no reports of hospitalisations, respiratory depression, or carbon dioxide retention (Ekstrom, 2015).

Advance care planning (ACP) is an important component of care for patient with advanced COPD in addressing patient's preferences on future life-sustaining treatments. A recent RCT showed that a nurse-led facilitated ACP has increased the uptake of ACP (Sinclair, 2017).

M10.2**Palliative and/or End-of-life Care for Patients with Advanced Chronic Obstructive Pulmonary Disease****09:00 Room 428****Models and Local Programmes of Palliative Care for Patients with Advanced Chronic Obstructive Pulmonary Disease**

Ng JSC

Department of Medicine, Haven of Hope Hospital, Hong Kong

Chronic obstructive pulmonary disease (COPD) is a leading cause of mortality and morbidity worldwide. People with advanced COPD have obvious palliative care needs. Their quality of life is compromised due to refractory and disabling dyspnoea as well as psychosocial impact from the disease. They have poor functional status which goes through a slow relentless decline, punctuated with unpredictable life-threatening exacerbations, reflecting the difficulty in prognostication and the importance of early advance care planning (ACP). However, in a retrospective study comparing non-cancer and cancer deaths in Hong Kong (Lau KS et al., 2010), only 3.6% of COPD patients ever received palliative care before death, compared with 79.2% of cancer patients. The same study found that in two weeks before death, only around 35% of COPD patients ever had ACP documentation in medical record, while such documentation could be identified in more than 60% of cancer patients.

A comprehensive care for patients with advanced COPD should include personalised disease-specific management and pulmonary rehabilitation, and should integrate palliative care, which also emphasises early support to family and covers the care at the end of life. Such care model requires expertise from both respiratory and palliative medicine, as well as concerted effort of an interdisciplinary team. Since 2010, palliative care programmes for non-cancer patients have been developed in different Hospital Authority hospitals, including some specifically targeted patients with advanced respiratory diseases. In this presentation, overseas care models for patients with advanced COPD would be discussed. There is also sharing on local palliative care programmes and the experience on use of opioids for dyspnoea, community support and advance care planning in this group of patients.

M10.3**Palliative and/or End-of-life Care for Patients with Advanced Chronic Obstructive Pulmonary Disease****09:00 Room 428****Non-pharmacological Treatments of Patients with Advanced Chronic Obstructive Pulmonary Disease**

Chan KCM

Physiotherapy Department, Ruttonjee and Tang Shiu Kin Hospitals, Hong Kong

Advanced chronic obstructive pulmonary disease (COPD) is often experienced as a series of ups and downs with lack of discrete transition to advanced stage. Patients with advanced COPD are usually suffered from disabling symptoms such as refractory breathlessness. It is a subjective experience with complex mechanisms and multiple causes, which could be exacerbated by reasons other than mechanical insufficiency of ventilatory system. Breathlessness also has impact on patients' thoughts, which induces stress for both patients and their caregiver.

Non-pharmacological treatments in multi-disciplinary pulmonary rehabilitation for patients with COPD have proven to improve patients' symptoms and function. However, the Chronic Care Model adopted in some pulmonary rehabilitation programmes for patients with mild to moderate COPD may not be effective for patients at the advanced stage.

The transition from rehabilitation to symptomatic control is seamless and could be reversible according to patients' condition and disease progression. Patients with advanced COPD can better benefit from pulmonary rehabilitation if the programme focuses on patients' symptoms, physical function and psychosocial stress. Recent research evidence showed that, pulmonary rehabilitation incorporated with Breathlessness Intervention Service Model, which emphasised on breathing, thinking and functioning domains, which could effectively manage the disabling symptoms for patients with advanced COPD.

Masterclasses

M11.1
Renal Medicine
10:45 Room 221

To P or Not to P: Ethics and the Kidney

Li PKT
Central Renal Committee, Department of Medicine and Therapeutics, Prince of Wales Hospital, Hong Kong

Nephrologists are generally regarded as clinicians with a holistic approach to manage patients. We have specialised skills by making use of high technology procedures, and adopt a general physician approach towards multi-system problems of patients, while taking into account their psycho-social needs as well.

At the same time, the ethical challenges to nephrologists can never be understated. In the principles of biomedical ethics, respect of autonomy, non-maleficence, beneficence and justice are four major areas. The dilemma for clinicians choosing unrestricted advocacy of patients or bedside rationing of healthcare is always real. There has been proposal of "administrative gatekeeping" as a means to strike a balance.

To P or not to P represents two elaborated concepts of P: Personalise and Prioritise.

To personalise or not to personalise involves the discussion of whether there is a totally free patient choice on dialysis modality using public resources. The concept of peritoneal dialysis first policy in Hong Kong, and how this can benefit the largest number of patients with the most cost effective and quality dialysis modality serves as a model and an example for discussion.

To prioritise or not to prioritise involves the discussion of kidney allocation system in the donation and transplantation field. The scarcity of cadaveric kidney donations and the need to allocate according to a fair and open system is a prerequisite. The allocation of kidneys in different sectors with different backgrounds, medical and social and other factors can bring in dilemmas that the medical community needs to provide input on the final system.

M11.2
Renal Medicine
10:45 Room 221

Paired Kidney Exchange in Renal Transplantation

Kwok J
Department of Pathology and Clinical Biochemistry, Queen Mary Hospital, Hong Kong

Kidney transplantation is the best therapy for end-stage renal failure. Similar to the global counterparts, Hong Kong is facing the challenge of severe shortage in kidney donation. Despite tremendous efforts to promote organ donation, the number of donated transplantable kidneys remain disappointingly low. As a result, a progressive increase in the number of patients on the waiting list.

There are less than 100 kidney transplants each year for the past five years in Hong Kong and the average waiting time for a deceased kidney graft is more than six years. The statistics show a significant gap between the number of kidneys donated and the number of patients on the wait list.

Amid the difficulty to secure sufficient number of deceased kidneys, one of the strategies running successfully worldwide is to expand the living donor pool. With the sophisticated advancement in medical skills and technology, living donor donation is a safe and mature procedure. However, the major obstacles of living kidney donation are ABO incompatibility and positive cross-match between potential donor and recipient.

Will the Paired Kidney Exchange (PKE) Programme offer an additional transplant option for the donor-recipient pairs? The PKE Programme aims to increase the chance of finding a compatible living donated kidney by exchange between incompatible pairs.

M12.1

What Matters to Patients? Insight from Patient Experience and Satisfaction Survey Programmes and Way Forward

13:15 Convention Hall C

Patient Experience and Satisfaction Survey: What Have We Learnt from Patients?

Wong ELY, Lui SF, Yeoh EK

Division of Health System, Policy and Management, The Jockey Club School of Public Health and Primary Care, The Chinese University of Hong Kong, Hong Kong

Since 2010, three HA-wide Inpatient Satisfaction/Experience Survey have been conducted. The first two surveys (2010 and 2013) have found a high score (out of 100) on level of confidence and trust in the healthcare professionals (90-94), patients being treated with respect and dignity (93-94), and a high overall rating (72-74) and over experience (80). The surveys have identified areas for improvement: (1) opportunity to talk to doctor; (2) staff introducing themselves; (3) patient's involvement in decision about care/treatment; (4) staff discuss with/comfort patients when they have worries or fears; (5) providing adequate information on (i) care for oneself; (ii) medication side effects; (iii) danger signals to watch; (iv) care and recovery; and (v) contact information when they have worry.

The latest inpatient survey conducted in 2015 (9,297 patients from 25 hospitals) reviewed similar finding. The overall patient experience score was 7.8 (out of 10), ranging from 7.5 to 8.2 among 25 hospitals. The scores were high for (1) confidence and trust in the doctors (9.3) and nurses (9.4); (2) providing clear and understandable answers to questions raised (8.8-9.0); (3) being respected and with dignity (9.5). The scores for some items were low: (1) information needed for care and recovery (4.6); (2) being told about the medication side effects (5.4); and (3) danger signs to watch out for (6.0).

The trends over the past five years were:

- (1) persistent good overall experience among patients;
- (2) areas with improving experience:
 - (i) information on condition, treatment, operation and procedure;
 - (ii) next of kin's opportunity to talk to doctor;
 - (iii) staff discuss with/comfort patients when they have worries or fears
- (3) areas for further improvement on information on leaving hospital:
 - (i) medication side effect;
 - (i) danger signals,
 - (i) information on care and recovery for patient and carers.

Masterclasses

M12.2

What Matters to Patients? Insight from Patient Experience and Satisfaction Survey Programmes and Way Forward

13:15 Convention Hall C

Human Touch in Healthcare Delivery

Chow KM

New Territories East Cluster, Hospital Authority, Hong Kong

Our beloved teacher Dr SF Leung mentioned that the computer has now entered the doctor-patient dynamic as a "third mistress," stealing away the time and attention of the doctor. True, the computer is powerful and important, handling many aspects of patient care from scheduling appointment to documenting history, ordering test, checking for on-hand medication and allergy, and communicating with colleagues. Does the computer have to be worshipped that much?

As a matter of fact, a recent article from the Annals of Internal Medicine reports that for every hour spent with patients, physicians spent two hours on electronic health records and desk work.¹ Yes, you hear us right. Two times of that spent with patients. Can any "mistress" beat that record? Can we beat that temptation?

Stated another way, we want to give our patients well-deserved human touch. At the moment, human touch is vanishing rapidly in modern hospitals. So much so that Abraham Verghese has to coin the term "iPatient," referring to the problem of chart-as-surrogate-for-the-patient phenomenon.² Another term is "chartoma" – a malignant and metastasizing disease immortalised by being cut and pasted into every note by the sheer key strokes of "CTRL+C" on our computer keyboard.

As pointed out by William Osler a century ago, "It is much more important to know what sort of a patient has a disease than what sort of a disease a patient has." Solutions will not be easy. But we can start by moving back, bit by bit, to the bedside.

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M12.3

What Matters to Patients? Insight from Patient Experience and Satisfaction Survey Programmes and Way Forward

13:15 Convention Hall C

Information Giving at Patient Discharge: Patient Discharge Information Summary Pilot Project

Tang KS

Quality and Safety Division, New Territories West Cluster, Hospital Authority, Hong Kong

There is much we can learn from Albert Einstein's observation:

"If you can't explain an idea to a nine-year-old, then you don't really understand it."

How often are our patients discharged from acute hospital without understanding what they need to do? Much of the time, elderly patients just do not understand their medication or appointments. The situation is made worse by the time constraint of medical staff, and even more so under the pressure of bed crisis.

While the doctors and nurses are hard hit by the time to communicate with patients, a succinct summary page can serve an additional role of patient education. That is the reason why we will pilot a Patient Discharge Information Summary for elderly patients discharged from acute medical wards. The summary page is designed to deliver simple and easy-to-understand information, including salient medication and drug-related take-home-messages, clinic and allied health appointments. All is written in plain language.

To minimise overloading of information, the summary will only target those common drugs that matter to patients, and the crucial drug information that patients need to remember. In other words, everything should be made as simple as possible, but not simpler.

M13.1 Respiratory Medicine**13:15 Room 221****Is Advanced Lung Cancer Becoming a Chronic Disease?***Ho J**Department of Medicine, The University of Hong Kong, Hong Kong*

Lung cancer, mostly non-small cell lung cancer (NSCLC), has been the top cancer killer in Hong Kong over the past two decades. The majority of patients with lung cancer present late with metastatic disease that does not allow curative surgical treatment. Recent advances in lung cancer therapeutics (especially for NSCLC) have enabled advanced lung cancer patients to survive much longer with preserved quality of life. Traditionally, systemic chemotherapy carries prohibitory side effects that do not allow prolonged administration beyond four to five months. At the turn of the millennium, newer generation chemotherapy emerged with better efficacy and adverse effects profile, thus allowing continued administration (maintenance chemotherapy) even for years. Discovery of targeted therapies is undoubtedly a major breakthrough in treatment of advanced NSCLC in the past decade. A growing list of potential targets for specific anticancer treatments is now evident that would facilitate personalised choice of the most effective therapeutic options. It is now the standard of care to look for potentially actionable targets, e.g. epidermal growth factor receptor (EGFR) mutations or anaplastic lymphoma kinase (ALK) rearrangement, at diagnosis of advanced NSCLC. There are now three generations of EGFR or ALK targeted therapies clinically available, which can help to overcome the hurdles with acquired drug resistance. In recent two to three years, immunotherapy has emerged as a novel anticancer approach especially in lung cancer. The mechanism of reactivating the endogenous immune system against lung cancer cells carries the advantage of sustained anticancer effects, resulting in prolonged survival in a selected subgroup of lung cancer patients. With the rapidly expanding armamentaria of lung cancer therapeutics and practice of precision medicine, it is now a common scenario to see advanced lung cancer patients coming for clinic follow-up for years, similar to patients with many other chronic diseases.

M13.2 Respiratory Medicine**13:15 Room 221****Health Risks of Obstructive Sleep Apnea***Ip MSM**Department of Medicine, The University of Hong Kong, Hong Kong*

What is obstructive sleep apnoea (OSA) and why does it cause health risks:

Obstructive sleep apnoea refers to the occurrence of recurrent episodes of functional obstruction of the upper airway during sleep. These obstructive episodes cause intermittent hypoxaemia (despite normal lungs) and sleep fragmentation. Further downstream, systemic sequelae of neurohumoral activation, oxidative stress and inflammation may occur.

Situation in Hong Kong:

Data in early 2000s showed that about 8% of men and 4% of women had OSA, while at least half of them were symptomatic. Ethnic craniofacial morphology may contribute to the occurrence of OSA despite our lower levels of obesity.

Health risks:

Neurocognitive impairment

Excessive daytime sleepiness is a cardinal symptom of OSA, though it does not correlate tightly with the severity of OSA. Untreated OSA with daytime sleepiness in drivers may lead to traffic accidents. Neurocognitive impairment, irritability and impaired quality of life have been noted.

Cardiovascular and cerebrovascular diseases

There is consistent evidence for an adverse effect of moderate/severe OSA on blood pressure, and OSA is now included in the list of "secondary" causes of hypertension. Treatment of OSA should always be considered in the armamentarium of anti-hypertensive therapy as it carries health benefits beyond lowering of blood pressure.

Clinically, independent associations have been repeatedly reported between OSA and stroke, congestive heart failure, and atrial fibrillation, but a definitive conclusion cannot be drawn due to limitations in the available data.

Insulin resistance and diabetes mellitus

Mounting evidence suggests that OSA may have, independent of obesity, adverse effect on insulin resistance and glucose metabolism. Nonetheless, such adverse effects may pale beside that conferred by lifestyle habits of diet or physical exercise. Several longitudinal cohort studies show that OSA is associated with incident diabetes, but treatment of OSA has not been consistently demonstrated to improve glycaemic status.

Masterclasses

M14.1

Geriatric Pearl

13:15 Room 423 & Room 424

Person-centred Care for the Older Persons through Medical-social Collaboration

Chan F

Department of Medicine and Geriatrics, Tung Wah Group of Hospitals Fung Yiu King Hospital, Hong Kong

According to the Census and Statistics Department of the HKSAR Government, life expectancy for men and women in Hong Kong is now ranking top in the world. Currently, 15% of Hong Kong's population are aged 65 or above, and this is expected to rise to 26% by 2031 and 30% by 2041. Moreover, 75% of older persons aged 65 or above are reported to have at least one chronic illness, and after the age of 65, the prevalence of disability increases about 1.5 times every five years. As one becomes older, multiple diseases and pathology will sooner or later set in. With increasing disability, the elders will become more dependent on medical, nursing, rehabilitation and personal care services as well as psycho-social-spiritual support.

To meet the multi-faceted needs of elders and to promote the policy of "ageing in place" of the Hong Kong government, various collaborative projects between the medical and social sectors have been rolled out, leveraging and maximising the use of resources by pooling talents and expertise, improving accessibility, reaching out to target population, and generating more holistic and patient-centred care for elders to stay healthy in the community, and to avoid unnecessary hospitalisation. Effective collaboration between clinical team, welfare sector, and empowered patients could offer a "triple win" situation, and successful programmes could be launched as long term partnerships.

In this presentation, key milestones in the development of patient-centred care through medical-social collaboration for the elders will be discussed, including Community Geriatric Assessment Service, Community Health Call Centre, Patient Empowerment Programme, Integrated Care Model, Dementia Community Support Scheme, End-of-life Care Programme in residential care homes for the elderly, Community Volunteer Service engaging local non-government organisations and chaplaincy services.

M14.2

Geriatric Pearl

13:15 Room 423 & Room 424

Geriatric Paradox

Au Yeung TW

Department of Medicine and Geriatrics, Pok Oi Hospital, Hong Kong

A paradox is a statement that leads to a contradiction or a situation which defies logic or reason. In the context of geriatric medicine, it refers to the condition that a risk factor for adverse health outcomes in general adult medicine may become a protective factor for older persons. Following the same rational, treatment guidelines or targets for various diseases derived from clinical trials in robust participants may not be applicable in older patients who are frail with multiple co-morbidities and competing mortality. In this presentation, the paradoxical relationship between obesity, blood pressure, glycaemic targets and adverse outcomes will be discussed to illustrate the importance of individualised therapy in patients who are old and frail.

M14.3

Geriatric Pearl

13:15 Room 423 & Room 424

End-of-life Care for Frail Elderly Patients with Multi-morbidity in the Hospital Setting

Luk JKH

Department of Medicine and Geriatrics, Tung Wah Group of Hospitals Fung Yiu King Hospital, Hong Kong

The older population was projected to grow to 15% of the total population by mid-2014 and to 30% (2.43 million) in 2034. Older people tend to have multiple co-morbidities, and end-of-life (EOL) issues are unavoidable. Patients with heart failure, Parkinson's disease, and advanced dementia may experience distressing symptoms similar to patients dying of a terminal condition. In order to improve the service to dying older patients at Fung Yiu King Hospital (FYKH), an EOL working group (EOL WG) chaired by a consultant geriatrician and consisted of senior and frontline ward nursing staff was formed in 2012. In June 2012, the EOL WG established the End-of-life Clinical Plan for Inpatients (EOL CPI) to improve patient and carer satisfaction, carer communication, and patient comfort in their last days of life. After EOL-CPI is launched, unnecessary medications and interventions were avoided in order to enhance patient's comfort, with a marked reduction in use of intravenous antibiotics, broad-spectrum antibiotics, blood tests, blood product transfusions, regular medications and "as needed" medications. Painful yet unnecessary vital sign monitoring with haemoglucostix was reduced, as was the use of physical restraints. In August 2015, a mix gender EOL Ward with eight beds was established to manage EOL patients. The EOL ward provides a comfortable environment with privacy for EOL patients, with adequate space for family members to stay at bed side. TV and washing basin are available at each bed for patients and family members. Flexible visiting hours are allowed. A small side room with sofa was available for relatives to take a rest in privacy or to calm down during the period of bereavement. In February 2017, the EOL WG started the Careful Hand Feeding Programme for EOL patients who have chosen to continue oral feeding until the last moment of their life.

Masterclasses

M15.1
Lesson Learnt from the Application of Stepped Care Model for Psychosocial Service in Palliative Care
14:30 Room 423 & Room 424

Stepped Care Psychosocial Services in Palliative Care

Kwok AOL
Department of Medicine and Geriatrics, Caritas Medical Centre, Hong Kong

World Health Organization defined palliative care as an approach to improve quality of life of patients and their families who are facing problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification, impeccable assessment, treatment of pain, and management of physical, psychosocial and spiritual problems. The definition highlights the importance of psychosocial care in palliative medicine.

Since 2012, the Enhanced Psychosocial Service Programme was developed for palliative care patients and caregivers based on the stepped care service model in palliative care unit under Hospital Authority. A psychosocial care service framework with four different levels of care was developed with modification from the guidance of National Institute for Health and Care (NICE) on cancer service. The four different levels of care include: Level 1 – recognition of psychosocial needs; Level 2 – early identification of psychosocial distress; Level 3 – assessment on and intervention for distress; Level 4 – diagnosis of psychopathology. Psychology Assistant who had received special training supervised by palliative care team will provide psychosocial service for lower level of care (Level 2 and Level 3), while clinical psychologist will focus on higher level of care (Level 3 and Level 4) according to the service framework.

After adoption of the stepped care model with Psychology Assistant integrated into the palliative care team, the efficiency and effectiveness of psychosocial care were markedly improved. The coverage by clinical psychologist and total attendance per clinical psychologist were enhanced after the programme. There were also significantly better psychological outcomes, less depressive symptoms, increased social support, better life meaning and reduced carer inadequacy among patients, while caregivers were with significantly less emotional distress and anxiety.

M15.2
Lesson Learnt from the Application of Stepped Care Model for Psychosocial Service in Palliative Care
14:30 Room 423 & Room 424

Enhancing Psychosocial Care for Patients with Palliative Care Needs in the Acute Medical Wards

Chu S
Department of Medicine, Queen Elizabeth Hospital, Hong Kong

Do patients in acute medical wards have palliative care needs?

From acute deterioration of their organ to newly diagnosed terminal cancer, some patients will spend their last moment in acute setting, a place usually associated with active treatment and cure. Many of these patients are in need of psychosocial support, something often neglected in high-tech medical care nowadays. Case examples will be used to illustrate what the situation is like in a busy medical ward. Perspectives from a non-palliative care specialist working in the acute wards will be explored, along with sharing of some local experience as to how the situation may be improved.

M15.3**Lesson Learnt from the Application of Stepped Care Model for Psychosocial Service in Palliative Care****14:30 Room 423 & Room 424****Stepped Care Model for Psychological Interventions in the Haematopoietic Stem Cell Transplantation Ward***Yeung DKY**Clinical Psychology Department, Queen Mary Hospital, Hong Kong*

About 80% of patients undergoing haematopoietic stem cell transplantation (HSCT) suffered from emotional distress over their treatment (Siegel, 2008). Before 2013, the referral of HSCT patients for psychological care was mainly initiated by ward staff. Since November 2013, a stepped-care model was introduced in Queen Mary Hospital aiming to enhance the efficiency of clinical psychology service, and at the same time to ensure the matching of patients' needs and the intensity of the intervention received. With the support from Psychology Assistant (PA) in providing low-intensity services, such as psycho-education, periodic screening and systematic mood monitoring at specific time from pre-HSCT to 12-month post-HSCT, Clinical Psychologist (CP) can focus on delivering high intensity services, such as addressing the anxiety on upcoming treatment and the psychological difficulties in adjusting to isolation ward.

The stepped-care model has three major advantages. First, the programme provides 100% service coverage as all new inpatients are seen by CP in intake interview to assess their psychological functioning, the presence of psychosocial stressors or coping difficulties. Relevant information is passed to the treatment team for devising individualised treatment throughout the hospital stay. Second, the provision of services was proactive, thus even patients who do not have overt signs of emotional distress, difficulties may be identified through interviews or objective measures. Third, the step-up and step-down mechanism allows flexible and efficient use of resources better tailored to patients' needs. Among those who received high-intensity CP intervention, a significant decrease in the scores of patients' anxiety, depression and emotional distress was found. With these benefits, the stepped-care model was shown to be able to address different levels of patients' psychological needs, reduce the risks of psychological morbidities, while ensuring service quality along the journey of HSCT.

Parallel Sessions

PS5.1

Collaborative Service Programmes

09:00 Room 423 & Room 424

Territory-wide Collaboration between Hospital and Social Service Organisations in Substance Abuse Service

Ko F

Occupational Therapy Department, North District Hospital, Hong Kong

Effective referral and collaboration among service providers of substance abuse programmes is the cornerstone to the service users who, in addition to quitting the substances, may have multiple needs in their path for abstinence. Initiating a referral will potentially address the needs of the substance abuser. Yet, anchoring or losing this chance depends on how connected the network of service providers is.

The Crisis Accommodation Programme of North District Hospital of the Hospital Authority is built on a territory-wide hospital-community collaboration model with organised and clear principles of services and roles, as well as an established platform for service interfacing and communication among all the collaboration parties. With hospital as the primary focus of comprehensive assessment, treatment and rehabilitation, the Crisis Accommodation Programme is a five-day in-patient programme serving to bridge the gap between treatment and community-based rehabilitation of the young ketamine users. Upon receiving referrals from collaborating NGOs of the community, hospital-based urological, radiological and other medical investigations and treatment are conducted to manage the health crisis of patients. Focused occupational therapy is provided to promote patients' awareness of their functional and role performance crises, to enhance their motivation, preparedness and readiness to engage in rehabilitation for abstinence from ketamine use and for relapse prevention. Upon discharge from the Programme, community-based rehabilitation service for abstinence is delivered by NGO partners in a standardised manner. Short-term post-discharge occupational therapy follow-up will be provided focusing on the patients' functional and role performance. Medical follow-up will also be provided on a longer-term and/or on a need basis.

Evaluation results demonstrated that the model of practice of the Crisis Accommodation Programme is acceptable and practicable to both the service users and the collaboration partners. It is also efficacious in decreasing ketamine consumption and in enhancing the motivation and readiness to abstain from ketamine use.

PS5.2

Collaborative Service Programmes

09:00 Room 423 & Room 424

A Multi-disciplinary Service Model for Enhancing Early Identification and Intervention for Mood and Cognitive Impairment among Young Stroke Patients (from Simple to Complex Conditions)

Cheung TCK

Department of Clinical Psychology, Haven of Hope Hospital and United Christian Hospital, Hong Kong

Mood problems and cognitive impairment are common sequelae of stroke that require clinical attention. The HHH multi-disciplinary stroke rehabilitation pathway incorporated clinical psychological service with preliminary effectiveness study suggested positive results. Data were collected between April 2014 and March 2016 under the enhanced service with involvement of a total of 457 non-aphasic stroke inpatients being screened and neuropsychology service provided for indicated patients, in addition to the conventional rehabilitation service by different disciplines. Results showed that patients had incremental improvement in mood and cognitive functioning when discharged under the new model. The clinical psychology service was found to contribute to such improvement by providing intensive mood treatment and neurocognitive rehabilitation respectively. It echoed to the updated recommendations on stroke care by the UK Royal College of Physicians (2016) that complex stroke cases with emotional and cognitive problems should be referred to specialised neuropsychological assessment and management. Further service enhancement in long-term follow-up of the mood and cognitive status of discharged patients and alternative psychological treatment modality including neuro-modulation such as transcranial Direct Current Stimulation (tDCS) on aphasic stroke patients with depression would also be discussed.

PS5.3

Collaborative Service Programmes

09:00 Room 423 & Room 424

The Continuous Quality Improvement Project on Allied Health Services for Stroke and Hip Fracture Rehabilitation – Promoting Outcome-driven Service

Wu K

*Allied Health Grade Department, Hospital Authority Head Office, Hong Kong***Objectives**

To develop a standardised method and minimal data set for surveying the service process and outcome of Allied Health (AH) services in stroke and hip fracture rehabilitation for promotion of outcome-driven service.

Methodology

Two time-limited standardised surveys (three-month for stroke; two-month for hip fracture) were conducted to gather data on AH service process and outcome for patients who have received stroke and hip fracture rehabilitation services. Data was captured via AH e-forms accessible in Clinical Management System (CMS). The data scope of the survey was standardised by pre-defined minimal data sets which were developed based on international clinical guidelines and locally validated measures. The functional domains include movement, self-care, nutrition, cognition, emotion and community re-integration. Moreover, swallowing and communication were included for stroke; pain was included for hip fracture rehabilitation. Data was provided voluntarily by staff of the following services: clinical psychology, dietetics, medical social services, occupational therapy, physiotherapy, prosthetics and orthotics and speech therapy.

Results

Data of 4,252 stroke and 2,052 hip fracture patients (CQI samples) were electronically captured. The age and gender of patients from the CQI samples were compared to non-CQI samples (2,036 stroke and 643 hip fracture patients).

Results indicated that AH service data is crucial in service planning, stratification and performance monitoring, these include: (1) understanding profile of patients served in various settings; (2) using specific indicators for triage purpose to facilitate patient flow and provision of appropriate care; and (3) identification of good practice.

Conclusions

The minimal data sets developed in this project may serve as exemplars for identification of similar data sets for other clinical conditions. The working structure, buy-in process and way of data reporting have served as prototypes for building up collaborative platforms among AH services for development of outcome-driven service. The results support the development of an integrated electronic documentation system for rehabilitation services to facilitate data accessibility for clinical use.

Parallel Sessions

PS5.4

Collaborative Service Programmes

09:00 Room 423 & Room 424

Nutrition Support in Enhanced Recovery after Surgery

Kan IYM

Dietetics Department, Prince of Wales Hospital, Hong Kong

Enhanced Recovery after Surgery (ERAS) is an evidence-based multi-modal and multi-disciplinary pathway to reduce surgical stress and limit post-surgical morbidity. ERAS, recommends pre-operative nutrition assessment and intervention, relaxing pre-operative fasting to two to four hours, rather than traditional 12 hours as well as introducing carbohydrate loading before operation. It is known to attenuate insulin resistance, minimise muscle and protein loss, and improve patient comfort. Another element for ERAS is the initiation of early post-operative diet and fluid. In post-operative period, nutrition support is introduced in the form of diet and/or oral nutrition supplements. It can be started as early as 24 hours after surgery. Oral feeding is usually started with liquid and transitioned to regular diet thereafter. Early oral or enteral nutrition has been demonstrated to be safe and preserves post-operative nutrition profile.

In New Territories East Cluster, ERAS programme has been initiated in selected surgical patients. Dietitians are actively involved in the care of patients before, during and after surgery. In the pre-operative period, patients with malnutrition risk are referred to dietitian for assessment and counselling. Nutrition assessment and optimisation of nutrition status before operation is crucial to enhance successful surgery outcome. Referred patients were followed up throughout their hospital journey including inpatient and post-discharge to ensure rapid hydration and nourishment post-operation and ongoing nutrition support after discharged.

PS6.1 Service Planning for the Ageing Population**10:45 Convention Hall A****Planning for the Future Elderly Services – a Local Perspective***Lam CC**Elderly Commission, Hong Kong*

In the face of an ageing population and increasing longevity, Hong Kong policymakers must adopt a proactive approach towards planning ahead to meet the growing demand for elderly services. Furthermore, the future generations of elderly have higher expectations of the quality of service delivery, diversity and choices, as well as their autonomy in making informed choices.

The Elderly Commission, led by the speaker formulates the Elderly Services Programme Plan (ESPP) by making long-term projections of future service needs of the elderly and giving advice to the Government on the strategic directions that elderly service sector should evolve towards. Perspectives on the roles of medical and healthcare professionals and public health policymakers in the paradigm shift in future elderly services will also be shared.

PS6.2 Service Planning for the Ageing Population**10:45 Convention Hall A****Considerations for a Geriatric Surgery Service***Tan KY**Department of General Surgery, Khoo Teck Puat Hospital, Singapore*

The management of elderly surgical patients has to be at a higher level compared to a younger patient. Geriatric surgical patients require multi-faceted holistic care. Considerations should include the physiological changes associated with ageing. Surgical management and planning for these patients must thus be holistic and all encompassing. It should be anticipatory of not only medical and surgical problems that may arise but also address the psychosocial issue that may arise. It should not aim to reduce morbidity and mortality in this group of patients only but more importantly, their post-operative functional status should be addressed aggressively so as to preserve their independence. Indeed, failure to address all these issues in an elderly patient may have a negative impact on the outcomes. Treatment goals have to be clear when the elderly are treated. Appropriate informed consent is important to ensure a satisfactory outcome for all sides.

Competing comorbidities, functional deficits and frailty in elderly surgical patients demand a more coordinated multifaceted care in order to achieve good outcomes. It is also beneficial to use geriatric practice in elderly surgical patients. While most centres claim that all surgical patients are managed in a multi-disciplinary fashion, experts from each discipline may still be working in their own silos. Only with a trans-disciplinary approach can achieve an optimal fashion that these complex patients demand. Only then can the real and practical outcome measure of functional return be achieved.

Parallel Sessions

PS7.1

3D Printing in Medicine II

10:45 Theatre 1

"3D Printing" Helps Cardiologists Save More Lives

Chan JLK

Department of Medicine, Queen Elizabeth Hospital, Hong Kong

3D printing has become widely adopted in different industries, such as aviation, fashion design, and architecture, etc. Many real-life applications of this new technology are being reported frequently. For example, 3D printed parts were used in over 400 GE90-94B engines for the new high-tech Boeing 777 aircraft; 3D printed footwears were created by different footwear companies; and the world's first 3D-printed office building was completed in Dubai in 2016. And this is no exception in the medical industry. 3D printing has been successfully applied in the orthopaedic and dentistry practices both globally and locally for years. The application of 3D printing in other medical specialties seems to be lagging behind, but this is not the case. Advances in 3D printing in cardiology practice are beyond imagination – application ranges from printing customised 3D models for patients' education, pre-procedural planning and even 3D bio-printing of tissues.

In the presentation, the experiences of applying 3D printing in the cardiology practice, specifically for structural heart interventions will be shared. The presentation will also cover the process of building 3D printed models from patients' specific data and the application of 3D printed models in our current practice, including rehearsals for better pre-procedural planning and treatment outcomes, as well as training and education. As the 3D printing technology goes more mature, we look forward to the application of patient-specific heart valve implants in the near future.

PS7.2

3D Printing in Medicine II

10:45 Theatre 1

3D Model Planning and Patient-specific Orthopaedic Surgery

Wong KC

Department of Orthopaedics and Traumatology, Prince of Wales Hospital, Hong Kong

In traditional orthopaedic procedures, surgeons have to mentally integrate pre-operative 2D images and formulate a 3D surgical plan. With advances in both medical imaging and computing programme, 2D axial images can be processed into other reformatted views (sagittal and coronal) and 3D virtual models that are representing patients' anatomy can be created. By analysing the digital information under enhanced visualisation, surgeons can then make a more detailed planning and surgical intervention on a patient-specific basis. With the mission of improving surgical accuracy and outcomes, our department introduced computer navigation-assisted orthopaedic surgery in Hong Kong in 2002, and our team has pioneered the technique for orthopaedic tumours since 2006.

In the last decade, 3D printing has undergone tremendous development and now has valuable applications in various fields of medicine. Although reports on orthopaedic applications are limited, orthopaedic surgeons are increasingly utilising the technology's flexibility in objects manufacturing. This additive manufacturing allows fabricating custom objects with complex geometries never possible previously with traditional subtractive manufacturing methods. These provide the potential for significant patient benefits.

Our department has started developing the technology specifically for surgical applications since 2011. The 3D printing techniques can generate models that give a better visual and tactile understanding of the complex anatomy and pathology of individual patients. It aids in education and surgical training. Most importantly, it can produce patient-specific surgical instruments and even sophisticated custom implants that are tailor-made to the surgical requirements.

As the clinical workflow of the 3D printing technology continues to evolve, orthopaedic surgeons should embrace the latest knowledge of the technology and incorporate it into their clinical practice for patient-specific orthopaedic applications. This presentation is to share our experience and the practical difficulties we encountered in this rapidly developing field; discuss the potential advantages and limitations, and suggest the directions for future development.

PS7.3
3D Printing in Medicine II
10:45 Theatre 1

Can 3D Printing Lower Health Expenditures and Improve Patient Outcomes?

Morris J

Department of Radiology, Mayo Clinic, USA

The Mayo Clinic has been able to improve the lives of patients while lowering health expenditures through the use of 3D printing. In the USA, as in most countries, private and governmental healthcare insurers do not reimburse 3D printing of anatomic models from radiographic data. This has led to a barrier to entry in most hospital systems and private companies despite early evidence in outcomes and cost savings across multiple disciplines. In this presentation, we will outline the cost savings that have occurred while improving care through several clinical scenarios. We will discuss the "Big Picture" approach to funding hospital 3D printing laboratory. The audience will learn cost saving realised in craniomaxillofacial surgical cases by in-house 3D printing of custom osteotomy guides and complex anatomic models. In the field of thoracic surgery we will demonstrate cost saving through less invasive approaches to pancoast tumour resections pioneered due to the understanding of complex anatomic relationships not otherwise possible without patient specific life size 3D printing. Cost benefits of minimally invasive patient specific simulation through 3D printed complex aortic aneurysms will also be discussed. 3D printing at Mayo Clinic has allowed us to advance medical education, surgical care, patient education and reduce overall cost in certain surgical settings.

PS7.4
3D Printing in Medicine II
10:45 Theatre 1

Medical 3D Printing: Opportunities and Challenges Ahead

McMenamin P

Centre for Human Anatomy Education, Monash University, Australia

The 3D printing (or additive manufacturing) revolution is often promoted as one of the most significant modern technological advances with impact way beyond its origins in computer-aided design and manufacturing where it helped engineers design and print prototype devices or parts without the need for conventional manufacture-modify-remanufacture paradigm. Whilst the technology has been heralded as having all sorts of impacts in medicine the evidence of its utility in medical education, surgical planning, procedure guidance, and simulation whilst beginning to emerge is in its very early days.

The apprenticeship model of surgical education has transformed over the decades, and although the extensive operative caseload of surgical trainees is the keystone to their training, surgical simulation plays a substantial role in their primary and continued education - including development of novel surgical techniques. The significance of simulators within neurosurgical primary and continuing training for example is reinforced by the central role they hold in courses and special groups organised by the Society of Neurological Surgeons and Congress of Neurological Surgeons. A consistent theme in the literature is the failure of most surgery training simulators to replicate the entire surgical approach and the lack of appropriate anatomical, visual and haptic properties of real human tissue. In our laboratory we are trying to move towards the creation of accurate replicas of real anatomy and pathology for surgical training. 3D printing plays a critical role in this process. We will also share our experience in bespoke 3D printing of patient pathology for pre-surgical planning and our perspective on the limitations of currently available multi-material 3D printers.

Parallel Sessions

PS8.1

Technology Advancement and Innovation

10:45 Room 423 & Room 424

Advancement in Rehabilitating Spinal Movement Control with 3D Motion Analysis

Chun E¹, Tsang S²¹Physiotherapy Department, Prince of Wales Hospital, ²Department of Rehabilitation Sciences, The Hong Kong Polytechnic University, Hong Kong

Low back pain (LBP) is a highly prevalent musculoskeletal dysfunction which contributes to substantial demand on medical care and rehabilitation globally. LBP sufferers frequently encounter difficulty in functional activities involving forward bending movement possibly due to pain, stiffness and inadequate flexibility. Previous research suggested that repeated bending remains one of the major factors contributing to the development and chronicity of LBP. People with LBP were found to have significantly lower speed of moving the lumbar spine during forward bending. Deficits of kinematics and interplay between the lumbo-pelvic region could be more profound if the bending task is performed at paces other than comfortable or self-preferred level. To better understand the possible strategies to enhance the outcome of prevention and rehabilitation of LBP, analysis of lumbo-pelvic movements during forward bending using the three-dimensional (3D) motion capturing system (Vicon) was carried out in a group of patients suffered from LBP. The effects of a wide range of bending speeds on the dynamic movement coordination, motor and balance control of the lumbar spine and hip joint during forward bending in standing were examined. The findings contribute to the understanding of adaptive changes of the movement, motor control of the lumbo-pelvic region and balance strategies adopted by individuals with chronic LBP while executing this simple but usually symptom-provocative task.

The experience of application of 3D motion analysis in evaluating the recovery of individuals with LBP at Prince of Wales Hospital will be shared. The outcomes of lumbo-pelvic movement control and patterns in terms of kinematics and kinetics, before and after a structured rehabilitation programme which emphasised on abdominal core strengthening and motor control exercises will also be discussed.

PS8.2

Technology Advancement and Innovation

10:45 Room 423 & Room 424

Advanced Diagnostic Technology and Laboratory Operations – Next Generation Sequencing in Pathology and Genetics Testing

Wong W

Hong Kong Children's Hospital Commissioning Team, Strategy and Service Planning Division, Hospital Authority Head Office, Hong Kong

The rapid development of next generation sequencing (NGS) technologies has driven a revolution in laboratories to investigate highly complex and diverse group of diseases, including inherited diseases and cancers. Based on the high sensitivity and throughput, NGS does not only extend the amount of genetic information but also largely reduce the sequencing costs through innovations in chemistry, optics, fluidics, computational hardware, and bioinformatics solutions. These features make NGS an effective and promising tool in clinical applications. A significant number of tumour markers and somatic variants have been discovered, making improved diagnostic and treatment decisions.

Different NGS platforms have different capabilities in detection of DNA or RNA sequence variations, genomic expression, DNA copy number variations and rearrangements, etc. A single method usually provides only part of this variety of information, while the cost, specimen type, and application considerations are very important. Advantage of NGS is that it uses just one sample in one workflow to test mutation status across multiple genes. However, there are still technical, analytical and ethics issues that need further refinement because the abilities of accurate calling the functional variants and comprehensive understanding of disease producing genetic variants are still limited. Although long-read sequencing overcomes the length limitation of other NGS approaches, it remains considerably expensive.

Generation of this vast amount of data brings challenges for both analysis and infrastructure, requiring innovative storage and bioinformatics solutions from the laboratories. Reliable algorithms have to be developed by clinical bioinformatics scientists and pathologists specially trained for complicated sequencing data analysis. Validation of the workflow and the pipeline of NGS application are demanding. A lack of reference materials for validation, proficiency testing and databases curated to accept clinical standards are likely the most significant challenge in managing and reporting genome sequencing data. This presentation is an overview of the features and the workflow of NGS application and examples of clinical applications of NGS in studying cancers.

PS8.3

Technology Advancement and Innovation

10:45 Room 423 & Room 424

An Innovative Mammographic Biopsy Technique to Meet the Challenges on a 3D Digital Breast Tomosynthesis Detected Lesion*Leung AYH**Department of Diagnostic and Interventional Radiology, Kwong Wah Hospital, Hong Kong***Background**

3D Digital Breast Tomosynthesis (DBT) is getting popular in private sectors. Compared with the 2D Full Field Digital Mammography (FFDM), tomosynthesis reduces the effect of tissue superimposition and may improve mammographic interpretation. DBT can reduce false positive call back and increase cancer detection rate.

A recent study showed that some lesions like architectural distortion would be identified more readily in DBT (73%) than that in 2D mammography (21%). Architectural distortion is a known mammographic finding associated with a high predictive value for malignancy. It has been shown to be the third most commonly missed mammographic abnormality on false negative 2D mammography.

Stereotactic biopsy examination is a common procedure in the management of breast abnormalities that is mammographic detected only. Patients from private mammography screening sectors may be referred back to Hospital Authority (HA) hospitals for further biopsy management. However, some DBT detected architectural distortions may not be easily visualised under our existing 2D stereotactic targeting equipment. 3D tomo-guided biopsy is not readily accessible in HA hospitals, it is also not common and is quite expensive in private sectors. When 2D stereotactic biopsy is not feasible, patient could then only be put for short term interval mammogram as an alternative. It is not desirable and may generate anxiety to patients.

To tackle such technical challenge and filling up the service gap, basic principle of stereotactic biopsy system has been fully reviewed. With the additive 3D information obtained from DBT, an innovative 2D biopsy technique has been investigated for localisation of such lesions.

In this presentation, the initial experience on the design of such technique to meet the challenges in the absence of 3D biopsy facility at Kwong Wah hospital will be shared.

Parallel Sessions

PS8.4

Technology Advancement and Innovation

10:45 Room 423 & Room 424

“The newHABIT Programme” – a New and Effective Multi-disciplinary Programme for Psychogeriatric Day Patient with Mild Cognitive Impairment

Kwok ICY¹, Wong L¹, Wu AYK², Lui SF², Kong SWC², Lo SY², Leung PKM³, Wong FPY³, Chan WWW⁴, Fung EML⁵, Ng GMC⁵, Tang CKH⁵, Wong OP⁶

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Introduction

Mild cognitive impairment (MCI) is a transitional state between normal cognitive decline in old age and dementia. “The newHABIT Programme” is a 12-week of 1.5 hour weekly structured multi-disciplinary programme tailored to older adults with MCI or early stage of dementia, and their respective caregivers. Five intervention groups conducted by psychogeriatric team, including psychiatrist, clinical psychologist, psychiatric nurse, physiotherapist, dietitian, occupational therapist, and medical social worker, were held in Psychogeriatric Day Hospital (PGDH) between 2014 and 2016.

Objective

To examine the effectiveness of “the newHABIT Programme” on changing memory-related behaviours, emotions and perceptions amongst psychogeriatric day-patients with MCI.

Methodology

43 elderly patients with MCI or early stage of dementia and 20 caregivers were recruited in five intervention programmes. Patients were required to complete the Patient Health Questionnaire (PHQ-9), Multifactorial Metamemory Questionnaire (MMQ; Contentment Subscale, Ability Subscale and Strategy Subscale) at three time spots (during intake, the 5th and the 12th sessions), while caregivers were asked to complete the Chinese Version of the Modified Caregivers Strain Index during session 10.

Results

Data of 43 patients were analysed. 72.1% of patients were female. 53.5% of them aged 70 or above and 72% of them with education level of secondary school or above. Satisfaction with memory abilities significantly increased from 40.8% to 57.5% ($p < 0.001$) while frequency of adopting memory strategies improved from 38.8% to 52.2% ($p < 0.001$) between intake and the 12th session. Everyday memory functioning significantly improved from 54.8% to 61.4% ($p = 0.004$), which implies patients made less memory mistakes. Depression score was significantly reduced from 8.1 to 4.6 after the 12th sessions ($p < 0.001$). Low caregiver strain was indicated amongst caregivers during group sessions. All patients and caregivers were satisfied with the programme.

Conclusions

“The newHABIT programme” demonstrated treatment efficacy in enhancing memory-related behavioural, emotional and perceptual changes among psychogeriatric day-patients.

PS8.5
Technology Advancement and Innovation
10:45 Room 423 & Room 424

State-of-the-art Model of PhysiotherApy CaRe for Dementia – Smart Move

Lo MY

Physiotherapy Department, United Christian Hospital, Hong Kong

Dementia is a growing concern due to the ageing population in Hong Kong. Physiotherapists can offer different non-pharmacological interventions to people with dementia for a better quality of life. Physiotherapists work as part of a multi-disciplinary team ensuring the delivery of high quality and effective care for people with dementia.

This presentation describes our experience in implementing a physiotherapy programme focused on providing collaborative care to improve the quality of life for those with dementia and reduce the burden of caregiver. Exercise has been reported to have positive effects on cognition, mood and behavioural symptoms of dementia. Physiotherapist input is important to make the exercise programme safe and effective by considering the age, abilities and type of dementia, as well as the needs and preferences of dementia clients.

A multi-component physiotherapy-led exercise programme “Smart Move” was developed since 2012 at United Christian Hospital. It included aerobic exercise, cognitive-targeted and dual task exercises and education activities. Physiotherapists in the multi-disciplinary team of Integrated Cognitive Assessment Clinic (ICAC) assess and recruit clients diagnosed with early stage dementia and in need of physiotherapy interventions to promote cognitive and functional abilities.

The Smart Move programme consisted of two parts, including an eight-session physiotherapist-instructed physical exercise empowerment class and a home-based targeted physical exercise programme. A prospective, pre and post-test self-control study in was conducted from 2013 to 2014. After 16 weeks of physical exercise training, participants (n=31) performed better in Stroop Color Word test (Wilcoxon signed-rank test, $p<0.05$), which reflects potential enhancement of attention and executive function. Moreover, their dual task gait speed was improved (paired t test, $p<0.05$). Neuropsychiatric Inventory and symptoms alleviated after training (Wilcoxon-signed ranked test, $p<0.05$).

The study showed that dementia clients would benefit from the physiotherapy-led exercise programme in terms of enhancement of attention, executive function, dual task performance, and alleviation of neuropsychiatric symptoms.

To help clients sustain the achievements, we also collaborated with NGOs and integrated the Smart Move programme in the community centres. Through the collaboration with community partners, our clients were engaged for sustainable exercise programme in the community as well.

Physiotherapy Smart Move exercise programme is a clinically cost-effective and accessible intervention. This novel collaborative model of care provided a new pathway to preserve and promote quality of life for people with dementia. Moreover, both the client and caregiver are beneficially attended.

Parallel Sessions

PS9.1

Hospital Design

13:15 Convention Hall A

Smart Hospitals for the Future

Ballantyne D

Health Infrastructure, NSW Health, Australia

In recent years, developments in technology have seen the invention of the 'digital hospital'. Whilst technology is a great enabler for health service delivery, the SMART hospital of the future must also be:

- Flexible and adaptable in its use
- Provide smart Furniture, Fixtures and Equipment/Major Medical Equipment solutions
- Manage logistics and support services
- Patient-focused and engage communities
- Provide a sense of place

PS9.2

Hospital Design

13:15 Convention Hall A

JurongHealth Campus – Ng Teng Fong General Hospital and Jurong Community Hospital

Ng KS

Hospital Operations, Ng Teng Fong General Hospital and Jurong Community Hospital, Jurong Health Services, Singapore

JurongHealth Campus is a part of the National University Health System (NUHS) group, serving the community in the western region of Singapore.

JurongHealth Campus comprises the integrated 700-bed Ng Teng Fong General Hospital (NTFGH) and 400-bed Jurong Community Hospital (JCH) which were designed and built together from the ground up as an integrated development to complement each other for better patient care, greater efficiency and convenience. NTFGH and JCH were envisioned to transform the way healthcare is provided, and together with the National University Hospital, National University Polyclinics, Jurong Medical Centre, family clinics and community partners, to better integrate healthcare services and care processes for the community in the west.

PS10.1 Working in Harmony – Happy Staff Happy Patient**13:15 Convention Hall B****The Anticipation of Errors in Patient Treatment among Medical Students***Klein J**Department of Medical Education, Melbourne Medical School, University of Melbourne, Australia*

While some research attention has been paid to how health professionals cope with the emotional impact of medical error, we examine how medical students anticipate future error. Through 23 interviews with final year medical students, we explore how errors are perceived, defined, and anticipated. We find that students are highly diverse in how they think about error, with some being highly anxious while others expressed lower levels of worry. All students, however, had concerns about making errors, and about the effects of errors on patients and on their own confidence, identity and career path.

PS10.2 Working in Harmony – Happy Staff Happy Patient**13:15 Convention Hall B****Conflict Resolution and Mediation with High Conflict Personalities***Yuen H**Conflict Resolution Centre, Hong Kong*

Mediation Ordinance takes effect from 1 January 2013 in Hong Kong with the aim to promote the use of mediation as a process of conflict resolution. The Ordinance describes mediation as a process whereby a mediator who is an independent third party without judging, assists the disputants to find out the issues, develop options, facilitate communication and to settle in whole or in part their dispute.

Since 2008, there are researches from the USA on high conflict personalities, their behaviour and symptoms which resemble personality disorder as known to the psychological professionals. These are people who appear to be normal but would have symptom of personality disorder such as borderline symptom of mood swings and bursts of uncontrollable anger, and other symptoms such as anti-social, narcissistic, histrionic types of personalities. When these people engage in a conflict situation, they become fixated with the dispute and would very quickly escalate to high intensity of emotions and even violence. Their emotion would lead them to jump to a conclusion and their tunnel vision would guide them to pursue their conflict through the court system by unending appeals.

In a hospital, there are very likely to have high conflict situations with members of families who have suffered losses and trauma. The research finding shows that 75% of patients diagnosed with borderline personality disorder have suffered some abandonment issue in the past history. There is now some clear evidence that when there is a loss or traumatic experience in life, the person will suffer from grief. The grieving process will cause denial of emotions, anger or depression before the person can fully recover from the loss by acceptance of what has happened. This experience of grief will occur in patients as well as their family members. Therefore, people with high conflict personalities are very likely to have experience loss and trauma in the past and have difficulty accepting the loss.

This talk will focus on how we can understand and handle these high conflict personalities and develop empathy for them.

Parallel Sessions

PS11.1 Transformation in Pharmaceutical Services

13:15 Theatre 2

Evolution of Korea's Pharmaceutical Service Model

Choi S

Department of Pharmacy, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea

Over the past 20 years, significant changes have been made in the field of pharmacy service. In 2000, the first amendment initiated by the Korean government was the legislative separation of dispensary and medical practice. Simultaneously, medication counseling by dispensing pharmacist was stipulated in the Pharmaceutical Affairs Act. The second change was the extension of the pharmacy college curriculum, from four years to six years starting from 2013. These transformations have led to a paradigm shift in the roles of pharmacists. Hospital pharmacies have attempted to expand their role from preparing and dispensing medicines, toward providing patient-centred clinical service by the following approaches: (1) intervention on prescriptions; (2) systematic medication counseling; (3) drug information provision; (4) medication safety monitoring; (5) therapeutic drug monitoring; and (6) multi-disciplinary medical team care. For more advanced pharmaceutical services, the Korean Society of Health-system Pharmacists has introduced a "clinical pharmacy specialist" certification system for hospital pharmacists since year 2010. Qualified pharmacists have thus served as pharmacy practice preceptors in various fields.

The need and importance for pharmaceutical services, as well as the challenges in providing advanced services, still exists. One of the major barriers is the shortage of workforce, with inadequate reward systems and ambiguous role definitions among healthcare professionals being other drawbacks. For advanced pharmaceutical care to achieve the common goals for patient welfare, healthcare professionals need to collaborate more effectively with each other, and understand and respect all professional roles.

PS11.2 Transformation in Pharmaceutical Services

13:15 Theatre 2

Steering HA's Pharmaceutical Services to a New Paradigm

Ngan T

Chief Pharmacist's Office, Hospital Authority Head Office, Hong Kong

Pharmaceutical services in public hospitals conventionally include drug supply and dispensing only. With the growing service demand and heightened awareness of medication safety, boundary of pharmaceutical care, along with the professional functions of pharmacists, it has been extended in both breadth and depth in recent years. The Hospital Authority (HA) has formulated a roadmap in its Strategic Plan for 2017-22 to put vision into reality, encompassing initiatives in both inpatient and outpatient pharmacy services to further enhance pharmaceutical care and empower patients in optimal use of medications.

Medication safety is the overarching mandate in delivering quality care for hospitalised patients. To this end, HA has strengthened the use of information technology to facilitate computerised decision support and enhance medication safety through closed-loop medication management. HA will take forward these initiatives by introducing further automation technologies, enhancing pharmacy system integration, strengthening cluster-based after-hour support in pharmacy services and fostering collaborative care by a multi-disciplinary approach. Pharmacists as part of the integrated care team will play a more important role in the clinical management of patients.

HA's outpatient pharmacy initiatives are targeted to address long waiting time, enhance medication management and empower patients for better self-care. A new operation model of outpatient pharmacy services is developed to improve medication management and service efficiency, and to optimise medication use and reduce drug wastage. HA will deploy suitable automation technologies in outpatient pharmacy services and continue to improve the accessibility of drug information through electronic platforms, thereby facilitating delivery of personalised medication management.

HA will keep on improving the professional competence of its pharmaceutical staff in order to cope with the evolving service demand, and extend the professional support of pharmacists in delivering holistic care for patients in public hospitals.

PS12.1

How and Why Staff Training is Important to Big Organisations

14:30 Theatre 1

Learning for Organisation Changes

Mak A

Civil Service Training and Development Institute, Civil Service Bureau, The Government of the Hong Kong Special Administrative Region

Organisations are facing unprecedented pace of changes nowadays. Riding the wave of uncertainties, developing employees' acumen and agility has been more important than ever. In this session, the speaker will share his thoughts on the role of training and development in talents and creating an enabling environment for people to learn and build their competencies for future challenges.

PS12.2

How and Why Staff Training is Important to Big Organisations

14:30 Theatre 1

Digital Innovation Shaping the Future of Learning and Development

Szeto D

Global Human Resources, Li & Fung Limited, Hong Kong

The digital era is changing our understanding of doing business, of learning and development in a fundamental way – and with unrivalled speed. The function of learning and development is inevitably undergoing a transformation. However, many companies and individuals hesitate to acknowledge the depth and impact of current mutation. With today's digital technology, by providing agile on-demand and just-in-time learning that meets specific skill set needs, is evermore making it possible for people to access learning contents at a much faster, more efficient and cost effective rate than ever before. The emergence of new technologies has also led to more innovative forms of learning experience.

Many previously unimaginable learning approaches and solutions are all now possible. Innovative learning technologies (like VR, AR, IoT and machine-learning) offer new channels for organisations to provide opportunities for employee development without the need to spend time and resources hosting formal training sessions. The ability to collect data is also providing intelligence and insights into the learning process, cloud computing is enabling people from opposite corners of the world to learn together, at the same time, with mobile devices offering even more choices on how, when and where they do it. All of which means, the way we learn and work has a multitude of potential in which to be enhanced. For these, digital learning innovation is taking the lead with a higher rate of engagement and distinctiveness.

Under recent advances in technology and communications, it has finally broken the so-called richness/reach trade-off - meaning rich learning experiences can be achieved, irrespective of where the instructors and learners are located. In this presentation, the speaker will quote from his previous work to illustrate how learning moments can be enabled anytime, anywhere by integrating learning innovation and digital technology, and no limit to what can be taught using digital learning. This is driving change in learning and development but, more importantly, smart organisations are seizing the opportunity to not just react, but to shape their learning and development approach to boost business innovation and growth.

Parallel Sessions

PS12.3**How and Why Staff Training is Important to Big Organisations****14:30 Theatre 1**

A Guide for Staff Training – the Snapshot Strategy and Check-ins Strategy for Constant Learning

*Lee M**Asia Pacific Institute for Strategy, Hong Kong*

Points of presentation include the followings:

- Many organisations realise that their system for evaluation of employees' work, subsequent training, promotion and payroll are increasingly out of step with their objectives.
- Managers are searching for something nimbler, real-time, and more individualised - something squarely focused on fueling performance in the future rather than assessing in the past.
- A new system with no cascading objectives, once-a-year reviews, and 360-degree-feedback tools will be shared.
- The new system's hallmarks are speed, agility, one-size-fits-one, and constant learning. All underpinned by a new way of collecting reliable performance data.

PS13.1 Using IT Data to Improve Healthcare

14:30 Theatre 2

Actionable Insights from Big Data

Cheung NT

Information Technology and Health Informatics Division, Hospital Authority Head Office, Hong Kong

The nearly 25 years of history of electronic patient data in Hospital Authority (HA)'s Clinical Management System has been an invaluable tool for patient care and service management, but it also represents a treasure trove of big data. HA has taken steps to unlock the value of this data with tools such as CDARS, but we are now exploring new and innovative ways to use the new techniques of Big Data Analytics, Visualisation and Machine Learning to make positive realtime enhancements to clinical care and workflow.

PS13.2 Using IT Data to Improve Healthcare

14:30 Theatre 2

How Could Big Data Improve Our Life and Human Well-being?

Meng H

Department of Systems Engineering and Engineering Management, The Chinese University of Hong Kong, Hong Kong

Technologies in mobility, Internet of Things, client-cloud architectures, affordable massive data storage, broadband networks and heterogeneous data, etc. have created an unprecedented explosion in data known as "Big Data". Big Data is characterised by its "Volume", "Velocity", "Variety" and "Veracity". Deriving "Value" from Big Data leads us to the field of "Analytics", which aims to understand the data and deriving intelligence to make evidence-based, optimised and insightful decisions. This presentation introduces The Chinese University of Hong Kong's initiative to embark on the inter-disciplinary pursuit of Big Data Decision Analytics. In particular, we describe a spectrum of our work related to our lives and well-being, including visual analytics for global cancer incidence, use of wearables for monitoring well-being, logistics management in healthcare, technologies for augmentative and alternative communication, as well as Big Data Analytics for healthy ageing.

Parallel Sessions

PS14.1 Community Outreaching Services

14:30 Room 221

Use of Innovative Information Technologies in Enhancing Community Care

Chim CK

Community Outreach Services Team, Prince of Wales Hospital, Hong Kong

The use of information technology in community care has drawn increasing attention in enhancing the management of chronic diseases in remote areas and for those with disability and limited support from carers. Through tele-care, tele-health or tele-medicine, there is emerging evidence that it can help to improve access to specialists' care, identify problems earlier, initiate and evaluate treatment plans accordingly, and hence enable more efficient healthcare service delivery.

In this presentation, experience from the Community Outreach Services Team of New Territories East Cluster on how to incorporate the innovative applications and technologies to deal with the increasing service demand will be shared. These include the use of "HA Chat" for tele-consultation and tele-communication; and mobile device to enhance quality care and data security in community care. The effects and outcomes of our programmes including the tele-wound consultation for complex wounds management, tele-infectious disease communication for proactive surveillance in aged homes, and the use of mobile device for outreaching service will also be evaluated and discussed.

PS14.2 Community Outreaching Services

14:30 Room 221

Past and Present of Outreaching Nursing Services in Hong Kong – Putting Patients at the Heart of Our Care

Mak MY, Tse D, Lee V, Mak F, Yeung SH, Poon L, Kng C, Lau CC

Community Healthcare Services, Hong Kong East Cluster, Hospital Authority, Hong Kong

Demographic shifts of ageing and longevity in Hong Kong greatly impacts on service demand of Hospital Authority (HA). Further, rising burden of chronic diseases challenges existing service models for better ways to manage needs.

Past experience shows fragmentation and duplication of nursing services in community care delivery which has a negative impact on the healthcare systems. To put patient-centred focus in care delivery and build capacity for future, our outreach nursing services underwent major re-engineering through streamlining and integration. Our goal was to ensure patients receive timely care with good continuity provided by the same nursing professional. However, it is never easy to set up a new service delivery model by merging nursing teams from different hospitals with different backgrounds, culture, practices and governance. For example, in the past, Community Nursing Services (CNS) was mainly responsible for nursing procedures while patient assessment in Residential Care Homes for Elderly (RCHes) was carried out by Community Geriatric Assessment Service (CGAS). Hence, for successful integration, a systematic approach should engage stakeholders in five areas: patient service delivery model and care protocols, staff training and handover, performance quality and deliverables monitoring, management support and governance, and team and culture building.

This presentation will provide an overview of how outreach nursing services in the Hong Kong East Cluster evolved from past to present, and looking for a strong future. It will outline our progress, explore lessons learnt, while identifying gaps and improvements for further attention.

Building an Integrated Service Bundles to Keep Diabetes Out of Hospital*Lo CW¹, Leung SH², Lee KY¹**¹Community Nursing Service, Kowloon East Cluster, ²Nursing Services Division, United Christian Hospital, Hong Kong***Introduction**

Diabetes is a major cause of morbidity and mortality in Hong Kong. It was the 10th commonest cause of deaths in Hong Kong and caused 492 registered deaths (1.1% of all deaths) in 2015. Hospital Authority projected that diabetes patients will increase by 29% between 2012 and 2017. In 2014/15, discharged patient referred to Community Nursing Service (CNS) for diabetic care accounted for 30% of total new cases both in Kowloon East Cluster (KEC) and all clusters. Although diabetic medication regime is optimised during hospitalisation, the blood glucose could be fluctuated when return to usual life activities. KEC CNS collaborated with endocrinology physicians and diabetes nurses in Tseung Kwan O Hospital on a pilot of an integrated care bundle to enhance discharge support to patients with complicated diabetes, aiming to keep them out of hospital, and self-managed their own conditions in the community.

Objectives

(1) To extend the continuity of care for patients with diabetes from hospital to community; (2) to stabilise the metabolic condition of patients with diabetes by empowering patients/caregivers on diabetes management; and (3) to strengthen community support and minimise healthcare utilisation.

Methodology

Patients with recent admission due to acute metabolic complications of diabetes requiring intensive monitoring, treatment adjustment, and empowerment for glycaemic control and compliance would be recruited to the programme. Recruitment could be made by the diabetes nurses or by CNS from their own patient pool. Patients are supported with regular CNS visits, immediate diabetes specialist consultation, fast track clinic and inpatient support if necessary.

Results

Sixteen patients were recruited. Home support by CNS ranged from 4 to 12 weeks during which patients were empowered to manage own glycaemic condition and resulted in significant drop in post 3 months HbA1c. Diabetes specialists had been consulted via phone or ad hoc clinic for 13 times, while there was no emergency attendance or admission required.

Conclusions

Results shown that these bundles of service allows early assessment and intervention to maintain patient with complicated diabetes condition in community, and living a better quality of life with self-managed disease. They also enable for step-down and step-up care in a seamless support network to meet patients' need.

Parallel Sessions

PS14.4 Community Outreaching Services

14:30 Room 221

A Trial without Catheter for Patients in the Community

Li KKY

Community Nursing Service, Princess Margaret Hospital, Hong Kong

Introduction

Trial without Catheter (TWOC) is an indispensable and integral part of indwelling urinary catheter management. TWOC performed in the community for non-ambulatory patients allows timely procedure with reduced risk of untoward events in hospital, elimination of patients' toil, reduced cost in transportation to hospital, and decreased burden of hospital services.

Objectives To generate a new model of service on TWOC for patients in the community; (2) to facilitate timely TWOC and prevent unnecessary admission of patients; and (3) to enhance patient experience in their home environment.

Methodology

"A TWOC Model for Patients in the Community" is a quality improvement model in Princess Margaret Hospital Community Nursing Service (CNS) with its groundwork supported by evidence, cross-specialties collaboration and staff empowerment. A thorough literature search on TWOC was conducted and the best available evidence was identified for formulating the model. Cross-specialties collaboration was established among Urology, Accident and Emergency, Medical and Geriatric departments for expertise opinions and further refinement of the model. Achieving clinical competency with respect to advanced practice development has been emphasised as central to risk reduction and assurance of quality care. Before implementation of the model, CNS nurses were trained with knowledge and management on TWOC. Staff competency on TWOC was ensured by audits at patients' homes.

Results

The TWOC Model was implemented in December 2015. Until the end of January 2017, 152 TWOCs were done with a success rate of 63%. Mean age of the patients was 80 years. 55% of them were male and 63% were living in elderly homes. Patients with unsuccessful TWOC were arranged earlier follow-ups or clinical admission for TWOC in accordance with the model.

Conclusions

"The TWOC Model for Patients in the Community" is an innovative approach in local area in delivering standardised and evidence-based practice on TWOC for non-ambulatory patients at their homes. This model promotes the optimal outcomes of TWOC for a patient with indwelling urinary catheter. Further research would be conducted to explore the predictors of successful TWOC.

C1.1
Medical
10:45 Room 428

Multi-disciplinary Training in Management of Breast Cancer

Cheng C

Department of Surgery, Princess Margaret Hospital, Hong Kong

The four-week training at the Breast Cancer Center of Seoul National University Hospital (SNUH) and 10-week training at the Department of Senology and Breast Surgery of Marien Hospital Dusseldorf Cancer Center (MHDCC) provides comprehensive knowledge on the multi-disciplinary management of breast cancer patients.

The Breast Cancer Center of SNUH is one of the top breast cancer centres in South Korea providing multi-disciplinary management to patients with breast disease. It is one of the high-volume centres in Seoul that up to 1,500 new cases of breast cancer are diagnosed every year. On top of the high volume clinical activity, it serves as a role model of multi-disciplinary team work. Through conferences and joint consultation sessions among surgeons, physicians, oncologists, pathologists and radiologists, the Breast Cancer Center is able to perform comprehensive management of each patient, and is the leading centre in cancer translational research. It owns a large bio-bank storing cancer/normal tissues as well as blood from breast cancer patients.

The Breast Center of the Department of Senology and Breast Surgery at MHDCC is also a teaching centre of the Heinrich-Heine-University. The Centre has extensive collaboration with Department of Radiotherapy, Department of Oncology, Screening Network and practitioners in the region. Professor Werner Audretsch, Director of the Department, is a world-renowned surgeon in the field of oncoplastic breast surgery. The Centre offers treatments to patients with both benign and malignant diseases without any restriction on surgical methods including all oncoplastic and aesthetic procedures, as well as intraoperative radiation therapy (IORT) with the latest version of the MOBETRON.

C1.2
Medical
10:45 Room 428

Centre for Medical Simulation Fellowship Training

Chan TN

Department of Accident and Emergency, Kwong Wah Hospital, Hong Kong

Medical simulation is increasingly used by healthcare educators worldwide. Hospitals of the Hospital Authority (HA) are developing simulation and skills centres which aim to integrate simulation into the established curricula of training for doctors and nurses.

Under the auspices of HA, Hong Kong Academy of Medicine and Center for Medical Simulation (CMS) in Boston, a simulation fellowship training programme was developed with the aims of maintaining and further developing simulation-based education in Hong Kong.

Selected candidates of this fellowship programme will spend two months at CMS in Boston. CMS is one of the world's leading providers of medical simulation education located in Boston. During two-month stay in Boston, learners participate in an array of simulation activities. Each learner also works on at least one self-directed simulation related project.

Learners have improved debriefing skills through active involvement in the generic simulation instructor courses at CMS. Through engaging in different inter-professional training activities, learners can also experience and appreciate different uses and manifestations of simulation-based education throughout the health education curricula.

Corporate Scholarship Presentations

C1.3

Medical

10:45 Room 428

"Sex Reassignment Surgery" – to Falsify or to Rectify the Body

Chan CK

Department of Surgery, Prince of Wales Hospital, Hong Kong

Transsexualism was first coined in 1970s, it was renamed gender identity disorder (GID) later in 1990, which is defined as a strong and persistent cross-gender identification with the patient's persistent discomfort with his or her own sex and a sense of inappropriateness in the gender role of that sex (Diagnostic and Statistical Manual of Mental Disorders, fourth revision, text revision [DSM-IV-TR]). Currently it is named gender dysphoria (GD) (DSM V) to emphasise the fact that individuals being bothered by this condition are not having genuine mental disorder.

The disturbance (not disorder) is not concurrent with a physical intersex condition and causes clinical distress or impairment in social, occupational, or other important areas of functioning. Besides, it affects all adaptive physical and psychosocial aspects of a person. Its diagnosis, however, is based solely on the history and personal perceptions.

The medical professional/clinician is obliged to find out if the individual meets the criteria of an irreversible gender transposition, and if he or she will benefit from medical (hormonal and surgical) sex-reassignment treatment. If a patient has absolved 12 months of real-life experience and at least 12 months of continuous hormonal treatment, the indication for surgical sex reassignment may be offered.

Treatment for GD individuals includes social and psychological support, cross-hormone treatment, and sex reassignment surgeries (SRS), which is considered to be the most effective treatment to date that can significantly relieve the psychological stress imposed on those individuals.

Genital SRS in male-to-female (MtF) transsexuals includes vaginoplasty (for the vaginal lining and inversion of the penile-scrotal skin flaps remain the technique of choice), clitoroplasty and vulvoplasty. The operation may be performed in one or two stages.

In contrast to genital reassignment in MtF patients, no operative standards are available in female-to-male (FtM) subjects. Recently, neophallus creation from sensate free forearm flaps (the radial forearm flap) has emerged as the most promising approach for those patients who want to have a neophallus. Other alternatives such as metoidioplasty or neophallus reconstruction from regional flaps (e.g. abdominopubic flap, anterolateral thigh flap) exist, but are also accompanied by multiple possible complications and re-interventions.

The SRS is complex and requires not only coordination of multiple procedures, but also lifetime follow-up of transsexual individuals. Best results are to be expected when using multidisciplinary teams of urologists, plastic surgeons, gynaecologists, and experts in sexual medicine in large-volume centres.

C2.1
Nursing
13:15 Room 428

Sharing on Overseas Corporate Scholarship Programme in Psychiatric Rehabilitation Nursing: Yale Programme for Recovery and Community Health by Yale University

Tsang HW

Department of Psychiatry, Pamela Youde Nethersole Eastern Hospital, Hong Kong

Background

Mental health services in Connecticut, New Haven, delivered by the US Government (DMHAS) have a strong collaboration with private local mental health authorities and non-profit private agencies to promote recovery in mental health and substance abuse services.

Observation

Supporting clients to reconnect with the community and regain a normal life is the core values of all recovery works. Recovery-focused projects such as "Citizens Projects", "What's Up", "Recovery Speak" promote extended roles of peer workers to be advocates in public health promotion and staff recovery training. Well-established credential training and career pathway for peer workers create conducive recovery movement. Successful implementation of "Person-centred Recovery Planning" empowers clients' strengths and motivation to accomplish personal goals and facilitates social inclusion. Trauma-informed Care provides people-first service and prevents re-traumatisation.

Reflection

Transformation from "care for" to "care with" culture requires strategic planning in structured staff training. Other key elements include staff commitment to recovery-oriented practice, standardised peer training and career pathways, continuous education to all stakeholders and collaboration work in cross-cluster hospitals with their community partners in mental health services.

C2.2
Nursing
13:15 Room 428

Effective Leadership (Royal Free London NHS Foundation Trust, UK)

Chang CM

Operating Theatre, Tuen Mun Hospital, Hong Kong

According to the Service Model for Nurse Consultant (Pain Management) (COC(N) Approved Paper 29/2011), the Nurse Consultant (NC) should maintain direct clinical service for at least 50% of his/her time including both acute and chronic pain service. At the same time, the NC should provide indirect clinical service to achieve excellence in pain management for the benefits of patients as well as staff well-being. Ultimately NCs should have specialty expertise and professional leadership skills that can positively influence the quality of pain management in nurses. Some NCs may find it difficult to understand the concept of leadership or consider themselves as leaders during initial appointment, as we were a one-man band before taking up this post. The Overseas Corporate Scholarship Programme for Leaders 2015/16 – Leadership offered us a good chance to learn and build up leadership competency through visiting the Royal Free London NHS Foundation Trust in UK. This programme covered a wide range of subjects such as managing self, empowering others, supporting wellness, dealing with difficult conversation, recognition and motivating others etc., which were packed into the "Royal Free's License to Lead and Manage Programme" and "Leadership Toolkits". We were arranged to attend the orientation programme, leadership forum meetings, seminars and group discussions, to observe their multi-disciplinary team meeting and set up, to shadow key personnel, and sometimes supplement with online toolkit. This provided skills and knowledge that enable us to lead, manage and coach our team to support and deliver patient care.

Corporate Scholarship Presentations

C2.3

Nursing

13:15 Room 428

Nurturing a Better Peri-operative Experience for Children and Family

Law NW

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Surgery is a stressful and threatening experience for both the children and families. The Hospital for Sick Children (SickKids) in Canada promotes partnership with family to better prepare a child for upcoming operation throughout the whole peri-operative journey. A one-stop Pre-anaesthetic Clinic enables anaesthetists and perioperative nurses to perform pre-operative assessments, investigations and prepare the plan to optimise physical condition before operation. Additionally, peri-operative nurses conduct pre-operative programmes including pre-operative assessment, education and psychological support with demonstration and therapeutic play for parents and child to get familiar with the peri-operative patient flow in anaesthetic and surgical procedures.

Parental presence for induction of anaesthesia is a common practice in SickKids to reduce separation anxiety and facilitate smooth induction process. Family-centred care is included in peri-operative service through timely information sharing with parents about child's surgical progress by phases via means of an electronic patient tracking system and allowing them to take care of the children in the post-anaesthesia care unit. The best care outcomes and experience for children and family were achieved by establishment of collaborations between surgical team and family with open communication and common goals.

In SickKids, all anaesthetic and surgical consumables are managed by material management team. It is a good practice to be suggested to Hong Kong hospitals to facilitate nurses focusing on direct patient care including education and psychological support for children and families to promote positive peri-operative experience.

The most amazing experience in SickKids is the teamwork among the surgical team members (anaesthesiologists, surgeons and peri-operative nurses). They have common goal, shared mission, value and mutual respect. Teamwork is a key to success in peri-operative service, it is worthwhile to organise scenario-based workshop to nurture teamwork culture. By developing trusting relationship between surgical team, children and families improve child's safety throughout peri-operative period.

Hong Kong Children's Hospital is a dream for healthcare providers and families of sick children with high expectation from the public. With the experience from SickKids, it is recommended to initiate integrated peri-operative service with family-centred and compassionate care to enhance satisfaction and experience for children and families during their peri-operative journey.

C2.4

Nursing

13:15 Room 428

Paediatric Pain Management – Conquering the Pain

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PAIN is a common complaint from patients upon admission. Nowadays, it is emphasised as the fifth vital sign for assessing patients' condition. However, in paediatric pain management, untreated pain is a significant cause of morbidity and even mortality. Especially in haematologic and oncologic disorders, pain can be complex and caused by multiple factors. Some of the children may experience one single type of pain at one time, but some can be multiple types of pain at the same occasion. This makes pain management in paediatric oncology even more challenging.

What are the nursing roles in providing safe, competent and high-quality care in paediatric pain management? With a better understanding of pain management, children's pain can be recognised and treated earlier. Meanwhile, understanding children's and their parents' need on conquering pain will help build trust and rapport that facilitate family-centred care.

Nurses from the pain management team have been the coordinators between multiple disciplinary teams including physicians, physiotherapist, occupational therapist, psychologist, nurses and child life specialists. Also, a pain management coordinator can provide support to the frontline nursing staff in case of misconceptions or discrepancies. This role helps facilitate the changes of some organisational factors like re-organising and unifying the routine on pain assessment, use of pharmacological treatment and non-pharmacological management.

C3.1

Allied Health and Pharmacy

14:30 Room 428

Maximising Patient Outcome by Extending Recovery-oriented Practice of Allied Health in Psychiatry – a Sharing from Yale Attachment Programme

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Recovery model is a global movement in psychiatric service. Considering mental illnesses as a form of disability, the model shifted our attention from disruptive condition related to mental illness to re-establishing life, role and function of persons in recovery (PIR). Recovery itself was a journey of PIR that one has to go through instead of an endpoint in mental illnesses. It stresses on the involvement of the PIR, significant others and their community in the process. A recovery-oriented practice has been implemented for a number of years in different psychiatric services in Hong Kong. The role of allied health (AH) profession in facilitating PIR's recovery journey in Hong Kong has to be further explored. With the support of Institute of Advanced Allied Health Studies, two clinical psychologists and three occupational therapists had attended a two-week attachment programme at the Yale Program for Recovery and Community Health (PRCH) of the Department of Psychiatry of School of Medicine in November 2016. Core elements and role of AH professions in recovery-oriented practice were explored through discussion sessions with academic staff and persons with live experience as peer workers and involved in meetings, visits and activities offered to those affected by mental illness. Person-centred care planning, citizenship, trauma informed care, financial health and supported employment were some of the new recovery initiatives successfully implemented in different psychiatric facilities in Connecticut. Peer workers played an essential role in facilitating the implementations and outcome of these services. The high level of involvement of peer workers, supported by a comprehensive system of training and employment in the state, was crucial in promoting recovery in PIR. Lessons learnt in the programme and possible new service directions in both AH professions would be discussed.

Corporate Scholarship Presentations

C3.2

Allied Health and Pharmacy

14:30 Room 428

Be a Mammographer Who Interprets Mammograms

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In the UK, some advanced practices are well established among radiographers. Mammographic image interpretation by qualified radiographers has enabled the UK National Health Service (NHS) Breast Screening Programme to provide double readings of mammograms as well as image interpretation for symptomatic patients since 2006.^{2,3,6} It has greatly improved their clinical services to the benefit of both patients and referring doctors in the UK.¹

Several studies showed that, double readings by radiographers improved cancer detection rate when compared with single reading.¹ Although the sensitivity of reading mammograms in a diagnostic setting is higher than in a screening setting (about 90%)⁵ with the use of additional diagnostic examinations, the risk of missing malignant lesions still exists. Therefore, pre-reading mammograms by a radiographer will most probably increase the sensitivity of the detection of malignancies in a diagnostic setting. In the Netherlands, about 70% of the patients receiving a mammogram in the hospital with either negative or clearly benign findings, are discharged without further evaluation.⁵

Attending systematic training programme is required before being qualified as a “first read” or “double read” radiographer in interpreting mammography. The trained mammographer can achieve a high sensitivity and specificity in the detection of malignancy and the ability to distinguish a benign condition, and also has the autonomy in deciding any additional views of mammography to provide further information for diagnosis.

In this presentation, the journey of how the author achieved her wish in becoming a qualified mammographer recognised by the UK through the corporate scholarship programme will be shared. Her achievements and contributions such as further developing mammographer trainees at the Prince of Wales Hospital will also be shared.

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C3.3
Allied Health and Pharmacy
14:30 Room 428

Bridging the Service Gap of Stroke Care – Formal Vision Screening by Orthoptists

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According to the statistical report of Hospital Authority (HA) in 2014-2015, there were about 3,000 stroke inpatients under care in HA hospitals. Extensive international studies have shown that ocular and visual problems are common in post-stroke patients. In UK, 70% to 80% patients suffer from visual difficulties following stroke. There is no data of the prevalence of visual problems among stroke survivors in Hong Kong as many post-stroke patients had undetected or undiagnosed ocular and visual problems. Formal visual evaluation is not included in current stroke care pathway.

Most of the visual problems are not detected by simply observing the individual. It requires questioning and assessment to detect and subsequently make an accurate diagnosis. Thus, visual impairment following stroke may be missed or misdiagnosed. Visual symptoms can be poorly defined by patients and particularly when individuals have co-existing communication problems and cognitive impairments.

Orthoptists are allied health profession in the field of ophthalmology who work closely with ophthalmologists. They specialise in the assessment of visual function and monitoring of visual development. They also assess, investigate and treat ocular muscle defects. Many tests used by the orthoptist are non-verbal and therefore responses can still be obtained even communication problem exists after stroke.

In UK, orthoptists are essential in the care and management of stroke patients by contributing their specialist knowledge and skills as part of the stroke multi-disciplinary team. The role of orthoptic service is highly recommended and recognised in stroke rehabilitation. Through the collaboration with multi-disciplinary team, early orthoptic assessment can be provided. Realistic goals can be set and therapy can be adapted to suit the needs of the patients. It is hoped that through the precious experiences in UK, further improvement in the management of stroke patients could be achieved.

C3.4
Allied Health and Pharmacy
14:30 Room 428

STarT Back – a Biopsychosocial Approach in the Management of Low Back Pain

Lam P

Physiotherapy Department, Queen Mary Hospital, Hong Kong

STarT Back Approach is a stratified care approach used in UK. The approach comprises of the STarT Back Screening Tool and the matched treatment pathway. The STarT Back Screening Tool is a simple prognostic questionnaire based on the identified and modifiable risk factors (biomedical, psychological and social) of poor clinical outcome or poor prognosis in persistent disability due to back pain. The questionnaire allocates non-specific back pain patients into high, medium or low risk group of chronicity. Each risk group is matched to corresponding treatment pathway.

Back pain patients of low risk group are provided with advice, information and reassurance of self-management. Back pain patients of medium risk group mainly have physical obstacles to recovery, and are provided with good quality physiotherapy treatment. Back pain patients of high risk group have additional psychological obstacles to recovery, and are given enhanced package of care with psychologically informed physiotherapy.

The treatment approach emphasises the good use of communication skills. Therapist guides the patient with non-directional questioning together with an active listening approach that facilitates self-disclosure on the patient side with an aim to understand how they feel and think about their pain. Explaining pain in neuroscience evidence, they encourage patients to accept it rather than control it. Through motivational skills, they are guided to build a meaningful life based on their chosen values. This biopsychosocial model allows the physiotherapist to have a better understanding of the patients' behaviour in relation to their pain journey and would therefore be able to develop a treatment programme that suits the patient's pace and encourages success in different stages of the rehabilitation process.

The STarT Back Screening Tool and the matched treatment pathway in UK demonstrated to be clinically and cost effective for patients with back pain in primary care management.

Corporate Scholarship Presentations

C3.5

Allied Health and Pharmacy

14:30 Room 428

Future Perspective of Clinical Pharmacy Service in Paediatric Nephrology – Insights from Toronto SickKids

Lai FY

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Key Training Activities of the Overseas Corporate Scholarship Programme

The Overseas Corporate Scholarship Programme at the Hospital for Sick Children (SickKids) in Toronto aims to incorporate advanced clinical skills and knowledge to facilitate the development of clinical pharmacy services in Hong Kong Children's Hospital (HKCH) which will be opened in 2018.

The 10-week clinical attachment in SickKids from September to December 2015 provided comprehensive training to paediatric pharmacists with an overview of pharmacy operations, including unit dose dispensing, aseptic parenteral admixtures and cytotoxic reconstitution, research pharmacy, and clinical pharmacy services at ward level. Therapeutic drug monitoring (TDM) service, one of the core clinical pharmacy activities, is delivered by specialised pharmacists under the authority of hospital's medical directives. Pharmacists also actively involved in providing extensive drug information support with establishment of hospital-wide formulary and guideline for clinical practice; and in delivering direct patient care activities such as medication reconciliation on admission and transfer, discharge drug counselling and new drug education for specific patient groups.

Outcome and Experience Sharing

Apart from the existing clinical pharmacy service provided in Pediatric Nephrology unit at Princess Margaret Hospital, an Annual Assessment Programme was commenced by clinical pharmacist since July 2016, to provide medication reconciliation and immunisation review for patients with chronic renal disease and renal transplant patients who scheduled clinical admission for detailed assessment in ward. The programme incorporated features of medication reconciliation, immunisation review, medication review and patient education, aiming to optimise patient care through safe and effective use of medications and to enhance patient's adherence to the medication therapy in renal patients. Preliminary results are encouraging and have demonstrated pharmacist's role in providing appropriate therapeutic recommendations and patient education for better patient care.

The clinical attachment in SickKids provided inspirations and directions for advancement of clinical pharmacy services in Pediatric Nephrology of HKCH in future. Potential areas for service development include: (1) Expanding pharmacist's role in TDM; (2) enhancement of patient care through patient education and counselling in both inpatient and outpatient settings; and (3) generation of evidence-based clinical practice through local research studies.

C3.6

Allied Health and Pharmacy

14:30 Room 428

Patient Empowerment Programme through Individualised Pharmacist Medication Education in SickKids, Toronto

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The 10-week training at The Hospital for Sick Children, Toronto (SickKids), the largest children's hospital in Ontario, Canada, provided comprehensive exposure on clinical pharmacy services. The Haematology/Oncology unit treats around 275 new cancer cases every year, or 20% of all in Canada.

At SickKids, children and families experience the delivery of health CARE through: Clinical practice, Administration, Research, and Education. Their focus of care is child- and family-centred with model positions the child at the core and as the priority in everything they do.

Pharmacists at SickKids contribute to CARE through in-depth medication education to patients and families in terms of treatment schedule, chemotherapy side effects and the management, supportive therapies, etc. Education promotes the well-being of patients and their families by facilitating parental/child adjustment to the diagnosis and treatment. Potential positive outcomes have been attributed to patient/family education, including increased treatment adherence, fewer hospitalisations, improved self-management capabilities and shorter hospital stays.

Inspired by CARE, a pilot project is implemented in the Lady Pao Children's Cancer Centre, Prince of Wales Hospital, Hong Kong, since December 2016 to enhance medication education to both children and families. The project targets newly diagnosed acute lymphoblastic leukemia patients. Individual bed-side counselling is given by a pharmacist at different phases of initial chemotherapy. Only essential education is covered each time to optimise learning. The pharmacist will also look for drug-related problems and feed back to the medical team if necessary.

F5.1

Healthcare Advances, Research and Innovations

09:00 Room 421

3D Printing – the Next Level to Reach for Splinting and Assistive Devices

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Introduction

3D printing allows occupational therapist to provide sophisticated splint and specific assistive devices to tackle patients' problems in activities of daily living. Four scenarios in applying 3D printing will be illustrated. Also, the outcome compared with conventional methods will be further elaborated.

Objectives

To determine the outcome of applying 3D printing in four scenarios:

- (1) Continuous ambulatory peritoneal dialysis (CAPD) connective device
- (2) Hand functional splint for amputated fingers
- (3) Ear splint
- (4) Needle assistive device

Methodology

First scenario

Poor eye-hand coordination of patient may increase the risk of peritonitis when performing CAPD. A connective device could be precisely produced with 3D printing technology. The CAPD system was anchored on the connective device. The Tenckhoff Catheter was stabilised on the movable tracks of the connective device. By moving the catheter along the tracts, this ensures the connection process of Tenckhoff Catheter contamination-free .

Second scenario

A gentleman with four fingers amputated had limited hand function. By use of 3D printing, sophisticated parts with hinge to mimic little finger (L/F) were made. A dynamic functional splint was prescribed that allowed patient to control the mimicked L/F by wrist action.

Third scenario

Ear splint has been used to control ear keloid. However, the pressure reduces once the keloid decreases in thickness. A 3D-printed G-shape serial adjustable clip was provided according to the shape of keloid. Patient could self-adjust the pressure by turning the screw to accommodate the reduction of keloid size.

Fourth scenario

Self-injection is a challenge for patients with fair hand functions. Without good anchor over injector, patients encounter difficulty to hold and control the depth of needle insertion. A 3D-printed adaptor allowing precise configuration to fit with injector can solve the problem of fair hand function.

Results

First scenario

More renal patients could perform CAPD by themselves with the connective device. The risk of peritonitis for the patients can also be reduced.

Second scenario

The hand function of patient was improved that one could grasp and release small size object and paper. Patient could also generate a pinch grip of 0.5kg and pick up 100g object.

Third scenario

The keloid size and pigmentation was reduced. Patient reported that the pressure of splint could be adjusted, and was more consistent compared with conventional design.

Fourth Scenario

Patient reported that the depth of needle insertion was well controlled and the custom-made design on wings of adaptor also improved the handling of injector.

Conclusion

3D printing does enhance our clinic service qualities in splinting and assistive devices prescription. It helps therapists to create a real product from an idea.

Service Enhancement Presentations

F5.2

Healthcare Advances, Research and Innovations

09:00 Room 421

The Pilot Study of Newborn Screening for Inborn Errors of Metabolism: a Joint Programme of the Department of Health and Hospital Authority

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Introduction

After release of the Policy Address 2015, the Workgroup on Expansion of Neonatal Screening Programme in Hong Kong set up a Task Force to plan and prepare for the implementation of the pilot study entitled "Pilot Study of Newborn Screening for Inborn Errors of Metabolism".

Objective

To evaluate the operation and effectiveness of newborn screening in identifying and managing babies with inborn errors of metabolism (IEM) during the first phase of the pilot study.

Methodology

The pilot study was launched on 1 October 2015 in two Hospital Authority hospitals (Queen Elizabeth Hospital and Queen Mary Hospital) for 18 months in two phases – phase I from 1 October 2015 to 31 March 2016 (covering 21 IEM diseases) and phase II from 1 April 2016 to 31 March 2017 (covering 24 IEM diseases). Education was provided during antenatal care to expectant parents with a goal to adequately inform them before they signed the consent form. Evaluation of the pilot study was based on data collected for the first six months of the study and focused on the logistics of the programme, parental education, workflow, timely arrangement of further workup for screen-positive babies and management of babies with confirmed diagnosis.

Results

The pilot study had been operated smoothly and met the modified standards from the United Kingdom Newborn Screening Programme Centre. Over 4,700 babies participated in the first phase of the pilot study. Participation rate was up to 99%. Ten 10 babies were called back for assessment because of positive results. Among them, two babies were confirmed with IEM including one with carnitine uptake deficiency and one with mild phenylketonuria. One baby was carrier of very long-chain acyl-CoA dehydrogenase deficiency and a mother with carnitine uptake deficiency was diagnosed as her baby had low free carnitine level. Incidence of IEM was about one 1 in 2,350. There was no false negative in phase I one. All babies with IEM were managed and remained asymptomatic.

The pilot study was found to be effective in terms of both the operation and clinical management of babies with IEM.

F5.3

Healthcare Advances, Research and Innovations

09:00 Room 421

An Inter-disciplinary Team Approach for the Prevention of Minimal Trauma Fractures in Long-term Care Residents

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Introduction

Minimal trauma fractures (MTFs) or care-related fractures occur mostly in debilitated and dependent long-term care residents, without the degree of trauma that usually causes a broken bone. MTF are devastating events in long-term care residents, causing pain and suffering, and increasing morbidity and mortality. Moreover, there may be medico-legal issues raised after MTFs for the possibility of mistreatment and inadequate care procedures.

Despite their impact, currently there is a lack of data on the risk factors associated with MTFs, and no evidence-based prevention strategies have been published.

Objectives

(1) To identify the risk factors of MTFs in long-term care residents; and (2) to develop prevention strategies accordingly.

Methodology

This was a longitudinal cohort study of prospectively collected data. Participants were followed from March 2007 to March 2016 or until death.

Setting: Shatin Cheshire Home (SCH), a 300-bed long-term care hospital in Hong Kong.

Participants: All long-term care residents who were in need of continuous medical and nursing care for their activities of daily living.

Measurements: Information on patients' demographic data, severe contracture defined as a decrease of 50% or more of the normal passive range of joint movement of the joint, and severe limb spasticity defined by the Modified Ashworth Scale higher than grade three, medical comorbidities, functional status, cognitive status, nutritional status including body mass index and serum albumin, past history of fractures, were evaluated as potential risk factors of subsequent MTF.

Results

396 residents (148 males, mean age=79, SD=16) were included for analysis. The presence of severe contracture and limb spasticity was highly prevalent among the study population. 12 residents (3%) suffered from subsequent MTF over a median follow-up of 33 (SD =30) months. Seven out of these 12 residents died during the follow-up period. The following two factors were found to independently predict subsequent MTF in a multivariate Cox regression: severe bilateral spastic knee contractures (hazard ratio=16.5, P<.0001), and diabetes mellitus (hazard ratio =4.0. P=0.018).

Based on these results, an inter-disciplinary team approach has been adopted in SCH for prevention of MTFs. Strategies include spasticity management and prevention of contractures which are combined with educational programmes for caregivers to identify the high-risk residents and apply proper handling techniques during routine care. Moreover, nutritional programme is implemented to ensure adequate nutrition, and supplementation of calcium and vitamin D. Pharmacological treatments for osteoporosis are also given to high-risk tolerated residents.

Service Enhancement Presentations

F5.4

Healthcare Advances, Research and Innovations

09:00 Room 421

Mobile Apps to Streamline Ward Round Across Seven Clusters

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Introduction

Clinical staff is mobile to perform various medical activities in bedsides, cubicles, wards, operation theatre and outpatient settings, etc. However, patient health information is now captured and stored in an immovable Clinical Management System accessible only in workstations. Mobile technology is long wished to improve current situation.

Since July 2016, the handy device iPad installed with in-house applications has now been piloted for accessing and editing patient health data at the point of care. The Clinical Management System (CMS) apps include: (1) laboratory result; (2) radiology result; (3) IPMOE history enquiry; (4) IPMOE prescribing; (5) Corp allergy; (6) personal memo and memo viewer; and (7) clinical note viewer. With Wi-Fi coverage, clinicians can view laboratory report, radiology image, inpatient prescription history and clinical notes anywhere at the hospital. The apps which link to CMS workstation facilitate doctors to prescribe and draft notes at their fingertips.

Objectives

To provide enquiry of clinical data at the point of care; (2) to support remote care.

Methodology

Seven mobile apps were developed for iOS device and piloted in hospitals from seven clusters with the following main functionalities:

- (1) Laboratory result – allows corporate enquiry of the most up-to-date laboratory report.
- (2) Radiology result – caters image viewing at bedside when the “COWS” are oversized to small cubicle
- (3) IPMOE history enquiry – supports viewing of inpatient drug profile
- (4) IPMOE prescribing – allows medication ordering during ward rounding
- (5) Corp allergy – facilitates corporate enquiry of patient's life-long allergy record
- (6) Personal memo – supports short note drafting at bedside
- (7) Integrated clinical note viewer – provides a consolidated view of various kinds of clinical note created by different disciplines such as clinicians, nurses and allied health colleagues.

Utilisation and feedback from seven clusters are collected for evaluation. A healthy and increasing trend of use was noted since launch.

Results

At the moment, around 2,640 iOS devices with clinical apps installed have joined the pilot and the number of devices will gradually increase across hospitals. More than 56,000 accesses of apps was noted since launch. 8,090 active user have logged in the apps, indicating 56,000 travels to CMS workstation to access patient data are avoided. Time is saved for more important clinical care activity. In general, we receive positive feedbacks from pilot users.

This greatly transforms and streamlines the patient management process. Patient health data is accessible at bedside that enables clinical staff to have better and efficient time use on direct patient care instead of getting access to workstation. Turnaround time is saved, which benefits the workflow in busy ward round.

In coming future, more CMS functions such as clinical notes and procedure records in mobile version will be available in market for more comprehensive patient record at the point of care.

F5.5
Healthcare Advances, Research and Innovations
09:00 Room 421

Introducing a Clinical Photos Attachment System: The Attachment of Clinical Photos on Individual Patient's Electronic Operation Record

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Introduction

An accurate and comprehensive patient medical record can facilitate clinicians to conduct an efficient and effective treatment for patients.

At the moment, clinical photos cannot be attached to electronic patient records and cannot be shared. These clinical photos can only be physically attached to paper medical records; meanwhile, a comprehensive medical record cannot be easily shared from one clinician to another during consultation.

Objectives

A new feature is highlighted that allows clinicians to attach clinical photos on individual patient electronic operation record, which improves inter-collegiate communication, diagnostic, patient care as a mean to monitor and record patient's treatment progress.

Methodology

Hospital Authority (HA) Information Technology (IT) team developed the clinical camera app (CCA) and patient album function (PA) at the end of 2015. Since launch, it has been popular among clinicians and nurses in different hospital departments. It allows clinicians and healthcare providers to easily perform the procedure of taking clinical photos and share them among healthcare providers within HA.

In view of the need of attaching clinical photos to electronic patient records, a new feature is developed in the first quarter of 2017 – attaching clinical photos to electronic operation (OT) record from Patient Album function.

Clinicians can take clinical photos at pre-operative, intra-operative and post-operative stage for patients. After that, these clinical photos can be selected at PA and attached to individual patient's OT record.

Results

As a result, a comprehensive patient OT record can be made and shared among clinicians and healthcare providers through the Clinical Management System (CMS).

Benefits of this new feature include:

- (1) Content of clinical records can be enriched.
- (2) Consultation efficiency can be improved.
- (3) Patient progress can be clearly demonstrated.
- (4) Duplication of medical treatment can be avoided.
- (5) Appropriate medical treatment can be prescribed instantly.

This clinical photo attachment feature will be launched in different specialties and hospitals from the second quarter of 2017. This feature will be firstly embedded in the OT record system and will be included in other clinical record systems lateron, including Consultation Summary and Referral Letter. In the end, this additional feature will enrich the content of clinical records, provide better patient care and facilitate effective communication.

Service Enhancement Presentations

F5.6

Healthcare Advances, Research and Innovations

09:00 Room 421

The Analgesic Efficacy of Diclofenac Suppository in Parturients after Caesarean Section

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Introduction

In the past, opioid (Pethidine) injection was used to be the foremost pain relief method for post Caesarean Section. However, there are well documented negative side-effects, such as sedation, nausea and vomiting. In order to reduce the opioid usage after Caesarean Section, our unit starts to give Diclofenac suppository (NSAID) in May 2016 if there is no medical contraindication. It is believed that multi-modal pain therapy, such as combination of NSAID and opioid, could achieve the goal of pain relief and minimise the side effects of opioid. Nevertheless, local experience on opioid-sparing effect of Diclofenac suppository has not been reported. Therefore, a retrospective study has been conducted.

Objectives

To evaluate the analgesic efficacy of diclofenac suppository given to parturients after Caesarean Section.

Methodology

This was a retrospective study with all the medical records of parturients undergoing Caesarean Section from March to May 2016 were reviewed. Those parturients under general anaesthesia and with post-operative patient controlled analgesia (PCA) were excluded from data analysis. This was to circumvent the potential post-anaesthetic effect that would affect opioid injection. Analyses were performed by using SPSS (version 16.0) statistical software. Chi-square tests and one-way analysis of variance were used to assess the relationship between various variables.

Results

Of the 154 subjects in this study, 31.8% (49/154) and 47.4% (73/154) parturients with and without Diclofenac suppository had received opioid injection respectively. The group with Diclofenac suppository was less likely to require opioid injection than the other group without Diclofenac suppository ($p=0.001$). For those who needed opioid injection, the mean interval between the end of operation and the first opioid injection in Diclofenac group was 7.72 ± 5.55 hours, and in non-Diclofenac group was 5.28 ± 4.88 hours ($p=0.012$). The total dosage of opioid injection given within 24 hours was less in Diclofenac group (151.5 ± 65.8 mg) than non-Diclofenac group (190.1 ± 98.5 mg), and p value = 0.018.

Results indicated that parturients under regional anesthesia with Diclofenac suppository after Caesarean Section was effective in opioid-sparing, and could delay the time of injection and reduce total dosage of opioid requested.

F5.7
Healthcare Advances, Research and Innovations
09:00 Room 421

Patient Monitoring and Scheduling System – a Solution to Provide Safe Treatment to the Right Patient

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Introduction

The Patient Monitoring and Scheduling System (PMS) is a newly designed computerised system for occupational therapists to manage daily treatment scheduling and provide vital signs monitoring for patients. By using PMS, therapists can prescribe treatments for patients on a tablet device. All the instruction details and precautions will be retrieved and displayed on the handheld barcode scanner. The patient's journey in Occupational Therapy Department is started when the barcode on his/her wristband is checked-in. The prescribed training activities, real-time vital signs monitoring, the precautions alert are then automated to run. In order to evaluate the effectiveness of PMS, a preliminary study was conducted in January 2016.

Objective

To compare the effectiveness of treatment delivery of PMS and the conventional practice of using paper activity card.

Methodology

Patients attending Occupational Therapy Department for treatments were divided into two groups: (1) Using PMS; and (2) conventional practice of using paper activity card in treatment delivery.

Five parameters were evaluated in our study:

- (1) Implementation of right treatment to the right patient.
- (2) Protection of patient data privacy.
- (3) Implementation of vital signs monitoring.
- (4) Implementation of fall prevention measures.
- (5) Implementation of Infection control measures.

Data in PMS group was retrieved from the PMS electronic database. For conventional group, data was collected by on-spot checking and retrospective records from paper activity cards.

Results

- (1) 100% accuracy in implementation of right treatment to the right patient, and 100% protection of patient data privacy after using PMS. While it is 98% and 53% respectively in the conventional group.
- (2) The compliance of vital signs monitoring improved from 18% in the conventional group to 76% in PMS group.
- (3) 95% of fall precaution measurements were correctly done after using PMS and it is 82% in conventional group.
- (4) The compliance of infection control measurements in PMS group is 88% for patients with contact precaution and 90% for patients with droplet precaution. While they are only 36% and 78% respectively in conventional group.

There were promising results on the effectiveness of PMS in improving the accuracy of treatment implementation, implementation of patient safety measurements and compliance of patient data privacy practice. Since March 2016, PMS has replaced all paper activity cards in treatment prescription. This system can also provide summary reports for therapists to review patient's progress and update treatment, it greatly increases the efficiency of patient management.

Service Enhancement Presentations

F6.1

Enhancing Partnership with Patients and Community

10:45 Room 421

Tripartite Collaboration Project: The Effectiveness of Health Qigong Baduanjin on Head and Neck Cancer Patients

Chan Y¹, Chan WK¹, Chau LL², Wong MY², Kwong MY¹

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Introduction

Tripartite collaboration is one of the main strategies of patient empowerment. "Tripartite" refers to (1) patients and community partners; (2) clinical professionals; and (3) Patient Resource Centre.

From 2015 to 2016, Health Qigong Baduanjin (BDJ) courses for head and neck (H&N) cancer patients were jointly organised by the Department of Occupational Therapy, Oncology, Community and Patient Resources of Pamela Youde Nethersole Eastern Hospital, and the independent patient association - Rising Sun Association. Qualified patients were referred by oncologists. BDJ courses were taught by occupational therapists who were certified by Beijing General Administration of Sport as BDJ instructors, while peers from Rising Sun Association participated as helpers. Besides, DVDs on BDJ demonstrations, participants' sharing and PRC services introduction were produced. Patient Resources Centre for Cancer Patients (Cancer PRC) coordinates and monitors the progress of the project.

Objectives

(1) To empower H&N cancer patients for better rehabilitation management via close collaboration between clinical professionals, Cancer RPC and patient associations; (2) to reduce the side effects of chemotherapy and radiotherapy on H&N cancer patients; (3) to improve Qualities of Life (QOL) of H&N cancer patients; and (4) to sustain holistic care via peer support by patient associations.

Methodology

Three BDJ courses provided by occupational therapists were offered to 18 participants diagnosed with H&N cancer. The three courses were held from November 2015 to August 2016. A pre-test was done to assess participants' cervical active range of motions (AROMs). Questionnaires were distributed to survey participants' QOL in initial assessment. Three months after the courses, cervical AROMs were assessed again. Also, a telephone survey was conducted to collect participants' feedback.

Results

Most cervical AROM was significantly improved after practising BDJ for three months. This was because there were five moves in BDJ that required neck extension and rotation. After analysing the data, participants' cervical lateral flexion to the right was statistically and significantly improved.

From the results of the questionnaires, at least 50% of participants reported to have mild improvement in all of the aspects mentioned in the questionnaires. 60% of them found that their neck and shoulder stiffness alleviated.

The whole collaborative project was included in a DVD which contained BDQ demonstrations, participants' sharing and feedback, and PRC services introduction. Participants' appreciation for the success of the Tripartite Collaboration Project was well received.

F6.2

Enhancing Partnership with Patients and Community

10:45 Room 421

Patient Engagement: Strategies to Improve Chronic Disease Control among Ethnic Minority Patients in the Primary Care

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Introduction

Hong Kong is the “Asia’s World City” with multi-culture and diversity. According to the Census in 2011, about 95% of the local inhabitants are ethnic Chinese; the remainders are mainly from South Asia (India, Philippines, Nepal, Pakistan, and Indonesia).

Objectives

Previous studies have shown that chronic disease, i.e. diabetes and hypertension, affect certain ethnic minority groups (EMGs) in various ways. Our mission is to provide comprehensive programmes that facilitate access for all, including EMGs, to the public healthcare system, and to promote that all individuals enjoy equality of health and guard against discrimination.

Methodology

A clinical audit on chronic disease control (DM and HT) among EMG patients was carried out in Yau Ma Tei Jockey Club General Outpatient Clinic. The first cycle was carried out from 1 January 2013 to 31 December 2013 with deficiencies of chronic disease control identified. A series of improvement strategies were taken since 2014, including internet resources for health information in multi-languages; standardisation and alignment of interpretation services across all primary care clinics in Kowloon Central Cluster; training and coordination with traditional healers and NGOs; diet counselling tailor-made specifically to different ethnic groups; culturally competent health promotion, including family/community members; set up of chronic disease evening clinic to cater for patients who could not attend regular daytime followup due to work, etc. Service improvement was reviewed between 1 January 2015 to 31 December 2015 (second cycle). Patients’ demographics, blood pressure (BP) and biochemical parameters were retrieved from the Clinical Management System (CMS) and the clinical outcomes between the first and second cycle were compared. Student’s t-test was used for analysing continuous variables and Chi-square test for categorical data. All statistical tests were two-sided, and a p-value of < 0.05 was considered significant.

Results

Compared with Chinese DM and HT patients, EMG patients were much younger and more obese. Deficiencies existed in the comprehensive management of chronic diseases, particularly with respect to glycaemic and BP control. During the first cycle, it was found that compared with Chinese hypertensive patients, EMG hypertensive patients have higher systolic and diastolic BP (both $P < 0.001$), and had a much lower proportion with BP adequately controlled (68% vs. 80%, $P < 0.001$). Average fasting blood sugar level was also higher in EMGs ($6.6 \pm 2.3 \text{ mmol/L}$ vs $5.9 \pm 1.5 \text{ mmol/L}$, $P < 0.001$). Similarly, the glycaemic control was poorer in EMG diabetes patients than their Chinese counterparts ($\text{HbA1c } 7.8 \pm 1.7\%$ vs $7.5 \pm 1.4\%$; $P = 0.006$), who had a much lower proportion of patients being adequately controlled metabolically ($\text{HbA1c} < 7\%$, 48% versus 60%, $P < 0.001$). After three years of implementations of the above improvement strategies, the key performance indexes of chronic disease control were significantly improved among EMG patients.

Service Enhancement Presentations

F6.3

Enhancing Partnership with Patients and Community

10:45 Room 421

Preliminary Findings on Keys of Success in Rehabilitation for Substance Abusers

Lai FHY, Tse PLC, Chiu FBF, Fan SHU, Cheung JCC, Chan ASM, Ho ECW, Tse TLY, So BTY, Tsui JWM, Cheung JPH, Chen EWC, Chan SHY, Wong SKM

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Introduction

Substance abuse (SA) has been a problem with every society and across every generation. It remains one of the major problems in Hong Kong. The increasing number of substance abusers in Hong Kong causes a huge impact to our healthcare system, considering that the consumption of illegal drugs impacts both emotional and physical health, potentially causing long lasting damage (Yuen, 2001). It has long been believed that social problem was one of the most prominent factors of substance abusers. Therefore, it is important to identify specific needs, determine appropriateness for treatment and facilitate communication with hospital healthcare and community partners which are providing SA rehabilitation services (Lehman, Simpson, Knight & Flynn, 2011).

Objectives

The study aims to measure rehabilitation needs and social problem solving style of SA patients through a set of modular assessments. This study endorsed the Treatment Process Model (TCU) by Simpson (2004), which incorporates evidence of pre-treatment factors; and specific-tailored treatment in promoting positive and sustainable changes over time.

Methodology

In 2016, 40 male substance abusers admitted to a regional psychiatric hospital were recruited. The ages of participants ranged from 18 to 48 years old (mean=28.2, SD=5.1), but 78% were between 21 and 30 years old. Treatment Needs and Motivation Assessment (Lam, Ng & Boey, 2002) was used to examine their ability in problem recognition, their desire for help, treatment readiness and their specific treatment needs. Drug Involvement Scale – DIS (Lam, Ng & Boey, 2002) was used to assess their problematic beliefs and values. To note for social problem tendency, the Chinese Social Problem Solving Inventory (Siu & Shek, 2005) was adopted to assess for positive problem orientation, rational problem solving, avoidance, negative problem orientation, impulsiveness and carelessness in their social problem solving.

Results

All forty participants showed they had adequate knowledge on the adversity of substance abuse ($t = 4.5, p < .01$). Moreover, all participants showed the correct attitudes towards quitting SA. It is worthy pointing out that their responses could be out of social desirability as suggested by Yuen (2001) and Narcotic Division (2002). Subjects showed to have avoidance ($p < .01$), negative problem orientation ($p < .001$), impulsiveness ($p < .05$) and carelessness ($p < .05$) in their social problem solving. Alike the findings from Simpson & Joe (1993), motivation for treatment like problem recognition, desire for help and treatment readiness, is closely tied to positive problem orientation ($r = .68, p < .01$). Moreover, acknowledgement of personal and social problems (e.g., depression, anxiety, hostility, risk taking) is negatively correlating with stimulant relapsing ($r = -.58, p < .05$). In preventing further relapsing, different strategies would be suggested to different types of social problem solving styles.

F6.4

Enhancing Partnership with Patients and Community

10:45 Room 421

Use of Short Message Service in Bereavement Follow-up in New Territories West Cluster Enhancement of Community Geriatric Assessment Team Service for End-of-life Care in Residential Care Homes for Elderly

Lai KM⁴, Au Yeung TW², Mok CK², Kwan YK¹, Leung KS¹, Lau ST¹, Cheng B⁴, Chan CH³, Lam YM², Cheung YL⁴, Ho KL², Kwok WY², Li SS², Kwok LC², Lam CC²

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Introduction

Enhancement of Community Geriatric Assessment Team Service (CGAT) for end-of-life (EOL) care in Residential Care Home for the Elderly (RCHEs) residents had been launched in New Territories West Cluster since October 2015. Traditionally, the condolence messages in bereavement follow-up are conveyed by phone or by mail to the patient's relatives. Since our patients are living in RCHEs, we have encountered a great difficulty in getting the addresses of the patients' relatives. Therefore, it is impossible for us to send the condolence messages to them after the death of patients. Besides, the relatives of deceased patients may be in deep grief or are busy in preparing the funeral for their love ones. It may not be suitable to phone them on the first few days after the death of their love ones. Therefore, our EOL care team tried to use SMS to express our sympathy as bereavement follow-up in order to improve EOL bereavement care and support the bereaved relatives.

Objectives

To share the experience and outcome of bereavement follow-up by using SMS for EOL care.

Methodology

Using condolence SMS in our EOL team for bereavement follow-up was initiated in March 2016. Once patient died, a standardised condolence message through SMS was sent to bereaved relative within three working days and EOL care nurse would make a phone follow-up within one month. The responsible nurse would tackle any abnormal grief or coping difficulties during the phone follow-up. Referrals to other professional would be made if needed. The responsible EOL care nurses would document the content of bereavement care in Clinical Management System for every phone contact.

Results

In 11 months, there were 130 patients died and 124 condolence SMS were sent by nurses to 124 bereaved relatives. All bereaved relatives had positive feedback on condolence SMS. 24 out of 124 relatives replied to EOL care nurses by SMS. Besides their appreciation, some of them showed their in-depth feeling on EOL care. In the meantime, EOL care nurses were also satisfied with the use of condolence SMS as the first bereavement contact to relatives. It improved the efficiency of bereavement follow-up and played the role of prologue before phone contact with bereaved relatives. Although the EOL team had encountered some difficulties at start of this programme, it provides us a great opportunity to learn or explore different ways in providing best care to our EOL patients in RCHEs and their families.

Service Enhancement Presentations

F6.5

Enhancing Partnership with Patients and Community

10:45 Room 421

Evaluation of a Targeted Intervention Programme for Patients with Diabetic-Kidney Disease

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Introduction

In Hong Kong, diabetes mellitus accounts for up to half of incident cases of renal replacement therapy. Besides having basic knowledge and skills on diabetes self-management, patients with diabetes complicated with diabetic kidney disease (DKD) should be well informed of their renal status and specifically, these patients should understand the clinical implications of DKD. It may include following renal diet, taking precautions to minimise the risks of worsening renal function, and be motivated to improve diabetes treatment targets in order to slow the progression of DKD and reduce cardiovascular risks.

Objectives

(1) To educate patients about clinical parameters related to renal function and to improve awareness of own risk factors; (2) to educate patients on renal precautions and self-management of DKD; and (3) to optimise glycaemic control.

Methodology

A joint programme organised by diabetes and renal nurse specialists, dietitians and endocrinologists was launched at the Diabetes and Endocrine Centre of Prince of Wales Hospital. Between October 2014 and December 2015, 90 patients with stage three or four chronic kidney disease (CKD) were recruited (male/female: 54/36, mean age 65.4±6.0 years; CKD stage 3/4: 59/26). In groups of 10, patients attended three 2.5-hour workshops followed by endocrinologist consultation quarterly over a one-year intervention period. The workshop empowered patients to understand their clinical condition, renal status and risk factors. We also included renal dietary principles and specific renal precautions. Peer sharing, discussion and experience exchange on self-management on different treatment modalities were promoted in the workshops.

Results

Upon completion of the programme, HbA1c was lowered by 0.3% compared with baseline. Patients rated a mean score of 5 out of 5 on improvement in knowledge on DKD management and they showed an appreciation on group discussion and sharing with a mean score of 4.97 out of 5. Among self-care behaviours, drug compliance, blood glucose monitoring and dietary control adherence were improved most with self-rated score of 4.96, 4.89 and 4.86 out of 5 respectively. The programme set the framework and components to be included in education of patients with DKD. Feedback from participants was positive with overall improvement in knowledge and self-care management.

F6.6

Enhancing Partnership with Patients and Community

10:45 Room 421

Real-time Information from Accident and Emergency Department (AED) to Public for AED Service Management

Tong AYH¹, Wong W¹, Kwong E², Li R², Chung A², Mok M², Luk E³, Kung CM⁴, Cheung I⁵

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Introduction

Patients make better choice of clinical service with more satisfaction when they can access more timely and relevant information. The demand for Accident and Emergency Department (AED) service is great over years, in particular during winter surge. Clinical data is captured for AED clinical service provision. Management information of AED situation is then available for monitoring of AED operation. Standardisation and transparency of real-time AED service waiting time of patients in turn helps the management of AED service demand and expectation alignment.

Objectives

AED service information can be generated with clinical data captured during patient care. Through the integrated Hospital Authority (HA) Information Technology (IT) systems, real-time AED service waiting time can be provided to clusters/hospitals, corporate management and public. With this relevant information, multi-disciplinary collaboration facilitates support to the AED services. Moreover, the Project provides standardised message on real-time AED service waiting time to public at the point of seeking AED service for better choice of clinical service, and helps manage their expectation and demand for AED service.

Methodology

From November 2015, the integration of clinical data in Accident and Emergency Information System (AEIS) and other clinical IT systems helps generate and disseminate the real-time AED service management information including waiting time, waiting list, admission block and the detailed patient list for clusters/hospitals and corporate management via Management Dashboard of Management Information Portal (MIPo). Automatic alert will be sent to relevant management teams when the threshold is met for AED and inpatient hospitalisation service accessibility management. The real-time AED waiting time is also provided to public via HA Touch app and displayed at AEDs for patient's informed decision of choice of clinical service. With reference to the service supply pattern, the 95th percentile of waiting time of AED patients in the past three hours or six hours (for 3:00am-9:00am period) is refreshing every 15 minutes. Standardisation of practice and data definition and also two-week validation of report generation criteria with all AEDs has been conducted before implementation.

Results

Real-time AED service management information is generated and disseminated to relevant management teams and public for better service management via the integrated clinical IT systems and mobile app, respectively. In turns, collaborative support from multi-disciplinary clinical and management team helps improvement of AED service delivery. Informed choice of clinical service also aligns patient expectation and improves service experience.

Service Enhancement Presentations

F6.7

Enhancing Partnership with Patients and Community

10:45 Room 421

Home Care Programme for Prevention of Hypertrophic Scar in Primary Cleft Lip Repair

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Introduction

Cleft lip and palate is a common congenital malformation with a frequency of around one in 700 live births. Children with cleft lip deformity face multiple physical and psychosocial problems associated with facial disfigurement. Treatment process is long and arduous and demands care from a multi-disciplinary team.

Cleft lip scars after surgical repair often become hypertrophic or discoloured thus compromising the clinical results. Surgical scar formation occurs in three sequential and overlapping phases: inflammation, proliferation and remodeling. They are targets of various scar treatment modalities which include Pulsed Dye Laser (PDL), Intra lesson Botox injection, scar massage, application of silicone-gel and silicone-gel sheet.

The Cleft Lip And Palate Service (CLAPS) in United Christian Hospital provides regional cross-clusters multi-disciplinary cleft care. Patients with cleft lip referred to our hospital for surgical care are managed in Neonatal Unit and Multi-disciplinary Clinic for peri-operative care as well as parental education for subsequent home-based care. The education programme includes pre-operative lip-taping, feeding and post-operative scar massage techniques, application of silicone-gel, silicone-sheet and nasal retainer. Based on resourcefulness and knowledge in scar care, the CLAPS nurses lead different roles in the education process, including multi-disciplinary coordination and planning, counseling, education and assessment in ensuring knowledge, skills, confidence and compliance by care-givers in pursuing scar care at home.

Objectives

To review the effectiveness in preventing hypertrophic scar after the home care education programme for infants with cleft lip repair.

Methodology

We conducted a retrospective review of clinical photos and scar assessment data in consultation records including objective colorimetry using skin pigmentation analyser and scar pliability and thickness as scored by Vancouver Scar Scale. Patients receiving repair of cleft lip from February 2012 to January 2016 at our hospital who underwent scar treatment programme were included in this study. The key post-operative scar management as coordinated by designated CLAPS nurse include:

- (1) Regular combined-clinic follow-up at 1, 2, 6, 10, 14, and 24 weeks after surgery and suture removal, which facilitate:
- (2) Education to care-givers regarding home-based treatment: daily scar massage, application of silicone-gel and silicone-sheet for at least six months.
- (3) Scar assessment by surgeon and trained nurse. Study parameters during follow-up include: (a) scar color and pigmentation measured by colorimeter; (b) pliability and thickness measured by Vancouver Scar Scale.

Results

A total of 45 children underwent surgical repair of cleft lip and nurse-led home care education programme during the study period. 26/45 (58%) of the children showed improvement in erythema gauge range: 84-55 unit initial post-operation vs 62-51u post-scar-treatment programme. 29/45(64%) had flat scars after six months (mean VSS thickness score 3. The mean VSS Pliability Score improved from 5 to 3.

Conclusion

The results show that scar management home care training programme via regular CLAPS Clinic follow-up ensures caregiver to maintain care to patient with skill and knowledge that they learnt in the programme, preventing scar hypertrophy and contributing to optimal surgical outcomes in cleft lip patients.

Patient Care Assistant Training on Suicidal Observation

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Introduction

Patient care assistants are a valuable part of the healthcare team and have close interaction with patients on a daily basis. They play an important part in suicide prevention by observing, reporting, and taking records of patients with suicidal risk. The crux of high quality suicidal observation relies on their vigilance and awareness on early signs or clues of suicidal tendencies. A structured orientation or periodic refresher training on suicidal observation is indispensable for sharpening their skills and competence. A workgroup was formed by representatives of different psychiatric units to develop a training programme for patient care assistants and monitor their quality of suicidal observation in day-to-day practice. The training programme was uploaded to webpage of Psychiatric Department for staff to review content at their fingertips.

Objectives

(1) To enhance staff awareness on suicidal observation; (2) to educate staff on bolts and nuts of suicidal observation; (3) to enhance skills and competence on suicidal observation; (4) to reinforce person-centred care when delivering care to patients with suicidal risk; (5) to highlight the important points that are easily overlooked and desensitised; (6) to consolidate staff knowledge by incidents sharing and quiz.

Methodology

A pre-test and post-test design was used, and the results were measured before and after the training. The test included 10 questions, five of them are selected as crucial questions that participants should answer correctly after training. Subjects were all patient care assistants from psychiatric inpatient units (psychogeriatric, female acute, female rehabilitation, male acute, male rehabilitation).

Results

The training was conducted in October 2016. 50 patient care assistants participated in this training programme (96% of patient care assistants working in psychiatric units). 29% on average answered the crucial questions wrongly while staff working in rehabilitation ward took more than 15%. All crucial questions were all answered correctly after the training. Participants showed interest in incidents sharing and were astonished about clients taking unusual ways of attempting suicide. It impressed staff the severity and unpredictability of clients' suicidal behaviour that immensely called for staff vigilant and prudent observation.

They appreciated nursing staff to recapture the essence of suicidal observation and were able to make revision independently. It is not just training on hands-on skills, but also delivers the key messages of person-centred care that is equally important when caring clients with suicidal risk. The promising result showed the vast changes of staff in skills and knowledge of observing clients with suicidal risk.

Service Enhancement Presentations

F7.2

Committed and Happy Staff

13:15 Room 421

Randomised Controlled Study to Assess Skill Retention at Six versus 12 Months after Simulation Training in Shoulder Dystocia

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Introduction

Shoulder dystocia is a relatively uncommon (0.2-3% of all deliveries) but serious obstetrics emergency which can lead to severe morbidity and mortality to the delivering fetus. Current evidence suggests that annual training is adequate to maintain skills for management of shoulder dystocia.

Objectives

To test our hypothesis that skills start to decline at six months and further decline to 12 months after training.

Methodology

In this randomised single-blinded study, 12 obstetricians and 42 midwives of our department were randomly assigned to attend a one-hour lecture with mixed simulation session on shoulder dystocia in the simulation centre of our hospital at month '0' (group two) or month '6' (group one). Their knowledge score and primary outcome were assessed before and immediately after the training, and subsequently retested at month '12'. Time taken to complete the simulation scenario (secondary outcome) was similarly assessed. Subgroup analysis was also performed after separating the data into doctors only and midwives only.

Results

Compared to pre-training, the drill score increased immediately after (or at-) the simulation training in both group one (8.26 vs 14.26, $p < 0.001$) and group two (9.46 vs 14.69, $p < 0.001$), but decreased at six months post-training in group one (14.26 vs 11.54, $p < 0.001$) and at 12 months post-training in group two (14.69 vs 11.54, $p < 0.001$), though to a level which was still better before the training. There was no difference in the decline in score from at-training to post -training between group one and group two (-2.63 vs -2.81, $p = 0.790$). Similar trend was found regarding time required to complete the simulated scenario. Subgroup analysis was performed separately for obstetricians and midwives where similar trends were found.

Conclusion

The study demonstrated that simulation training results in immediate improvement in shoulder dystocia management, however knowledge degrades over time. Ongoing training is suggested at a minimum of 12 months interval but ideally at six months interval for both doctors and midwives.

F7.3
Committed and Happy Staff
13:15 Room 421

Innovative Ways to Reduced Hand-arm Vibration Level

Leung KK, Lam C

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Introduction

Barrier-free design recommends design considerations to facilitate greater independence of people with disabilities by making the built-environment more accessible and friendly. This is even more important in hospital settings. Queen Mary Hospital (QMH) should therefore ensure our facilities to comply with the statutory requirements on barrier-free facilities. The high patient volume in the relatively confined floor areas induced noise and hand-arm vibration problems to our staff and even patients/visitors when passing through the Tactile Guide Path (TGP). Hong Kong West Cluster (HKWC) Occupational and Safety Health Team has carried out various improvement works to minimise the impacts of TGP on daily operation of the hospital.

Objectives

To reduce hand-arm vibration level generated from the Tactile Guide Path (TGP) in QMH.

Methodology

The hand-arm vibration level while the trolley was being pushed across the TGP was measured by "SVAN 958A Four Channels Sound and Vibration Analyser". A survey of the overseas standards related to hand-arm vibration was conducted. The trolleys employed for transportation within the hospital complex was studied in detail. A trolley with a new design was proposed. A prototype was produced by a local manufacturer. Hand-arm vibration study was conducted again. The prototype trolley was then sent for trial by supporting staff members in QMH and HKWC hospitals. In view of the production lag time, an additional innovative measure of using anti-vibration polymer handrail/handle cover was employed for trolleys currently in use after demonstration of effectiveness in reduction in hand-arm vibration. Feedbacks from staff were collected during the trial periods.

Results

The hand-arm vibration level when the existing trolley was being pushed across the TGP was 23.77 m/s^2 . The prototype trolley was built with more study materials and novel caster design. The hand-arm vibration level recorded on this prototype trolley was 10.44 m/s^2 , which is significantly reduced. The hand-arm vibration level recorded with the anti-vibration polymer handrail/handle cover was 17.73 m/s^2 , which was also reduced when compared with baseline data. The feedback on the new trolley design from the supporting staff was very favourable. The design of the anti-vibration polymer handrail/handle cover was further improved after staff feedbacks.

Conclusion

Any alteration in the design of hospital facilities might pose new hazards to the staff. Our approach to tackle the impacts of the TGP had shown the effectiveness and importance of tailor made equipment. Quality improvement would definitely be required after taking into consideration of the feedback of end-users. While complying with the regulatory requirements of barrier-free design, it is important to sustain a safe and healthy workplace in QMH and a caring culture to our colleagues.

Service Enhancement Presentations

F7.4

Committed and Happy Staff

13:15 Room 421

Promoting Staff Influenza Vaccination by Vaccination-on-wheel in Prince of Wales Hospital

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Introduction

Previously, the overall influenza vaccination uptake rate of staff was low. In order to protect our staff and patients from influenza in winter, a series of promoting channels was set up to encourage staff to get seasonal influenza vaccination as convenient as possible. Among all, the mobile Vaccination on Wheel (VOW) service is noted to be one of the effective strategies welcomed by staff. Therefore, in 2016/17, the VOW service was further strengthened to enhance its effectiveness.

Objective

To enhance the attractiveness and usage of VOW with the target of increasing injection rate by 50%.

Methodology

In order to enhance the attractiveness and usage of VOW, Central Nursing Division initiated a series of promoting activities and channels with collaboration of various departments to encourage the staff to get seasonal influenza vaccination conveniently.

The promotional actions were implemented as follows:

(1) Increase convenience by expanding service coverage

Apart from routine tour rounds of VOW to all clinical departments, VOW hotlines were provided to staff for adhoc booking services, and the service coverage of VOW services was further expanded to non-clinical settings and congregation for on-site Influenza vaccine injection. In addition, promotional booths and satellite injection stations were set up with information technology support to provide on-site injection.

(2) Demonstrate role model by senior management and staff representatives

Senior management, senior doctors and nurse managers were invited to accompany with VOW grand rounds to clarify the myths of influenza vaccination. Furthermore, the seniors' photo of receiving vaccine were posted at the hospital intranet site which also reported vaccination status of all staff in New Territories East Cluster (NTEC) to encourage more staff to receive vaccination.

(3) Make use of peer influence and invitation by managers

Furthermore, we organised competitions to promote staff vaccination by frontline nurses and senior staff, such as General Manager (Nursing), Chief of Service and Department Operations Managers to join the VOW team that they visited their respective wards to cultivate peer influence among frontline staff and motivate colleagues for injection.

Results

Compared with last year, there was a significant increase in the uptake rate of influenza vaccination in all staff categories and a high vaccination rate of more than 33% in NTEC was achieved. By comparing the data of staff vaccination of 2015/2016 and 2016/2017, it revealed a vaccination rate of 20.2% and 33% (as at 12 February 2017) respectively.

From October 2016 to January 2017, there were 47 VOW related activities implemented in Prince of Wales Hospital. Total number of staff vaccination given via this programme was 1,154 with a significant increase in vaccination rate of 78%. It showed an increasing demand for VOW service and a significant upward trend for participants in all staff categories from 2010/11 to 2016/17.

Furthermore, as compared with walk-in cases of Staff Clinic, vaccination rate via VOW has exceeded the Staff Clinic (HASC) by more than 55% in 2016/17.

F7.5
Committed and Happy Staff
13:15 Room 421

Can Mechanical Device Replace Manual Handling in Re-learning the Sit-to-stand of Stroke Patient? A Single-blinded Randomised Controlled Trial

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Introduction

In Hong Kong, stroke is one of the commonest causes of hospital admissions with the largest number of bed days. It usually affects the patient's functional mobility especially sit-to-stand, which is the most important prerequisite for independent living. In the past, lifting up the patient by physiotherapist is a common method to regain this ability, in which repetition is key to success. In a growing demand of this population, there will be a higher chance of staff injury. Hence, a new regimen focusing on the training by assistive device may be a better way to achieve the goal.

Objective

To investigate whether the 10-session of mechanical device is as effective as manual sit-to-stand training to improve the independence of standing up.

Methodology

The study was an assessor-blinded, randomised controlled trial. All selected patients should be on first episode of stroke, with good mental status and were unable to stand up independently. They were randomly assigned to control or intervention group that training was provided by physiotherapist and mechanical device respectively. The mechanical device was equipped with a weight stack and a pulley locking system to provide graduated support of standing up and sitting motion. By using a counter-weight mechanism, only minimal manual guidance was needed. All subjects should wear safety harness to prevent fall. Both groups of patients had no lesser than 100 repetitions or 10 minutes/day and five days/week of training sessions. The outcome measures were Sit-to-Stand Test (SST) from the Balance Master® and the success of standing up, which was defined as the patient could complete the SST from the Balance Master®, were assessed after 10 sessions.

Result and Conclusion

From January 2015 to March 2017, 38 stroke patients had completed the study (intervention: 18, control: 20; mean age 69.4 years). 12 out of 18 patients (66.7%) in intervention group and seven out of 20 patients (35.0%) in control group could complete the SST ($p=0.05$). This test also reflected that the subjects in intervention group were capable of standing up in a more efficient way, by faster forward weight shift and lesser muscle strength. The results confirmed that this new training method is as effective as the traditional one to regain the independence in sit-to-stand of stroke patients. It may minimise staff injury when encountering the challenging growing demand.

Service Enhancement Presentations

F7.6

Committed and Happy Staff

13:15 Room 421

Enhance Physical Activity Level of Hospital Staff: Peer Influence and Convenience on Participation as Enablers

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Introduction

Ample evidence from researches showed that physical activity level is correlated with physical and mental well-being. Despite these benefits, surveillances conducted by Department of Health have consistently shown that over 60% of adults in Hong Kong are not meeting the World Health Organization's recommendations on physical activity. Nurturing physical activity habit during leisure time is particularly challenging among busy working people in Hong Kong in which lack of time, place and motivations are common hurdles.

Objectives

To explore factors that will enable hospital staff to enhance their physical activity level through an easily participated and self-monitored walking programme.

Methodology

A six-week programme – “Joyful Walk Round the World” was organised in a public hospital with an aim to promote walking 10,000 steps per day. Staff were invited to join the programme and the number of steps that they had walked each week was recorded using mobile device or apps. The aggregated number of steps walked, the equivalent location in the world that they reached and the top five achievers were promulgated to all staff weekly. To gauge the views of participants about physical activity and the enablers, a survey was conducted at the end of the programme.

Results

116 staff in total had registered to the programme, and 39,075,487 steps in total were achieved which was equivalent to walking more than 60% of the circumference of the Earth. 35% of participants could achieve the 10,000 steps per day target throughout the programme. Survey results (N=62) revealed that majority (85.5%) of respondents considered walking during leisure time is an effective means of physical activity, however only about 70% of them considered 10,000 steps per day is achievable. Convenience is an important factor to attract them to join healthy programme (91.8%). In terms of enablers, using t-test, physical activity with group participations will motivate them to walk more than just educational talks or promotion booth ($p < .01$). Programme to enhance staff's cognition in physical activity and their alertness against health risk is important but not sufficient to motivate busy people to take part in physical activity. This study suggested that peer influence and group activity as well as convenience to participate could motivate and reinforce hospital staff to enhance physical activity level.

Turnover Intention: Experiences of Nurses Working Live

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Introduction

Nursing manpower is a crucial determinant of patient outcomes. New graduates of Generation Y nurses comprising 50% of the workforce in current healthcare arena. Their new perspectives on career planning, job security and role commitment are frequently studied recently and it is known that Generation Y nurses are much different than previous generation. The challenge of retaining Generation Y nurses is still a hot issue. No one would deny that the traditional retention strategies and management style on the Generation Y nurses are no longer feasible. A decision, therefore, has been made to begin structured EXIT interview to frontline nurses by Nursing Services Division (NSD) of Pamela Youde Nethersole Eastern Hospital so as to gain insights into the reasons of leaving the hospital, and eventually disseminate information across departments and act on responses from departing nurses.

Objectives

(1) To explore the underlying issues affecting their decision on resignation; and (2) to understand stabilising and destabilising experiences in nurse working environment.

Methodology

A qualitative approach with purposive sampling was adopted. A face-to-face semi-structured EXIT interviews were conducted to nurses, who resigned within our hospital by NSD on a voluntary basis. The interviews were recorded and transcribed into verbatim data and coded. Inductive content analysis had been done.

Results

35 frontline nurses (31 registered nurses and four enrolled nurses) were interviewed. Over 80% of the nurses considered leaving their workplace and made decision in less than six months. All of them are known as Generation Y nurses. It is not surprising that they view their experiences, career expectations and needs is different than those of previous generation. Almost all quitters highlighted that they are sensitive to management attitudes and skills.

Destabilising experiences which boosted nurses' decision on leaving include: (1) Inadequate team engagement by firstline supervisor and ward manager. First-line supervisor and ward manager were unable to give positive coaching attitude and constructive feedback regularly. (2) Perceived work stress from heavy work demand which affected personal work-life balance.

Stabilising experiences for revitalising nurse retention include: (1) Managers or supervisors provided intangible emotional support and their wish to spend time on understanding their learning needs could postpone the intention and decision of resignation. (2) Clear and foreseeable individual training and development plan – preceptorship and support programme should apply to nurses without clinical experiences in our hospital (i.e. central recruitment, scattered recruitment and after clinical rotation). Every nurse working in a new clinical area should have a recognisable preceptor with consistent preceptorship period over 50% of contact time among their clinical duties. (3) Supportive co-worker relationship. (4) Professional incentives from gaining recognition from care recipients and relatives, so as to acquire sense of accomplishment manifesting their nursing goals.

Service Enhancement Presentations

F8.1

Young HA Investigators Presentations

14:30 Room 421

Pressure Ulcer Prevention and Management: Evaluation of a Home-based Education Programme for Caregivers of Elderly: A Pilot Study

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Introduction

Pressure ulcer has become a great concern in geriatric care nowadays. But education programmes on pressure ulcer prevention and management with proven effectiveness for family caregivers are rare.

Objectives

To fill the service gap, the purpose of this study was to develop a home-based education programme on pressure ulcer prevention and management for caregivers of the elderly. The effectiveness of the programme was evaluated in term of caregivers' knowledge of pressure ulcer and their compliance with pressure ulcer prevention and management measures.

Methodology

24 cases with patients aged 55 or above as well as their caregivers were recruited from convenient sampling. All cases had pressure ulcer risks with Norton Scale Score <14 and were taken cared at home. It was a quasi-experimental pre-test and post-test design. Compared with conventional practice, the study intervention was an evidence-based and structural education programme tailored made to caregivers at home who took care of elderly with risk of pressure ulcer. It was developed with reference to the National Pressure Ulcer Advisory Panel (NPUAP) and the Institute for Clinical Systems Improvement (ICSI). The programme included education on knowledge about pressure ulcer, proper skin care, selection and use of support surfaces and demonstration of preventive measures. There were two outcome measures. The first instrument was the brief pressure ulcer knowledge test, which was simplified from a validated measurement called The Pressure Ulcer Knowledge Test. The second instrument was a checklist on compliance with pressure ulcer prevention and management measures. It was referenced from the pressure ulcer prevention protocol developed by the ICSI and NPUAP. The measures were assessed pre- and post-education programme. Data was analysed using descriptive statistics and repeated measures.

Results

Compared with the test results before intervention, there was a significant increase of the pressure ulcer knowledge of caregivers ($p < 0.000$) and their compliance with pressure ulcer prevention and management measures after intervention ($p < 0.000$). Preliminarily, the home-based education programme on pressure ulcer prevention and management for caregivers of the elderly was effective in increasing caregivers' pressure ulcer knowledge and their compliance with pressure ulcer prevention and management measures.

A Cluster-based Inventory Management Programme Leading to North District Hospital Blood Bank Service Enhancement on Platelet Transfusion

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Introduction

The corporate-wide average platelet wastage is around 2-3%. For a long time, there is an exceedingly high platelet wastage of >30% (> 600 units per year) in North District Hospital (NDH), which also has a restricted platelet stock.

Review of transfusion data identifies that there is a vicious cycle that platelets are over-reserved and for relatively non-indicated patients (e.g. platelet count >100x10⁹/L) for fear of lacking platelet supply when needed. With a short self-life of platelets (five days), reservation for just-in-case transfusion further reduces the availability of platelets stock and also contributes to high platelet wastage, deferring negotiation for increase in platelet stock from HKRCBTS as monitored by Central Committee (Transfusion service).

Objectives

(1) To reduce platelet wastage in NDH; (2) to maintain a stable platelet stock in terms of quantity and functional life with timely supply; (3) to break the above vicious cycle by addressing the worries of clinical teams and hence promote a better working partnership from bench to bedside

Methodology

A cluster-based inventory management system and logistics are developed and implemented through dynamic monitoring of platelets stock with temperature monitored re-direction and circulation of platelet units within New Territories East Cluster.

Phase one:

Since March 2015, we have successfully negotiated with Prince of Wales Hospital (PWH) for taking up nearly expired (Day four/five) platelets when they are not used up by routine cluster transport on weekdays, and by taxi on weekends and public holiday. To facilitate urgent platelet transfusion when platelet stock is not available in NDH, PWH has also backed up the platelet stock support by a direct one-way delivery (PWH to NDH) instead of two-way delivery (NDH to PWH to NDH).

Phase two:

Further to these stock logistic initiatives and drastic improvement in platelet wastage, we have successfully liaised with HKRCBTS again to double the regular platelet stock in NDH to a higher level of eight units since November 2015.

Results

By a cluster-based service, PWH Blood Bank has served as a secondary parent stock and also absorbed the wastage generated by NDH through dynamic stock monitoring and higher utilisation rate. No raise in platelet wastage is observed in PWH (2%).

Phase one programme has dramatically reduced the platelet wastage in NDH from >30% (>600 units per year) to 7% (116 units) in 2015.

Phase two programme ensures a very stable stock in NDH with reduction of monthly extra platelet transportation from PWH or HKRCBTS from 15 to 7 times on average. This timely supply also addresses the worries of clinical teams with alleviation of tension amongst clinical and laboratory frontlines. Less just-in-case reservation is recorded. A further reduction of platelets wastage to 4% (58 units) is observed from January to November 2016.

This pilot programme illustrates that a win-win outcome is possible on both resources utilisation and service provision through a cluster-based inventory management system.

Service Enhancement Presentations

F8.3

Young HA Investigators Presentations

14:30 Room 421

Survival in Patients with Chronic Obstructive Pulmonary Disease Following Pulmonary Rehabilitation

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Introduction

Pulmonary Rehabilitation Programme (PRP) is an important component in the management of chronic obstructive pulmonary diseases (COPD). Established benefits include improvement in exercise performance, reduction in symptoms and healthcare utilisation. However, survival benefit was uncertain. Data from PRP of Department of Respiratory Medicine (RMD) of Kowloon Hospital (KH), the first department in Hong Kong that inaugurated PRP, was analysed to fill this knowledge gap. The results would be useful in identifying patients at risks and facilitating future service revamp.

Objectives

To explore the survival functions of COPD patients recruited in KHRP from 2003 to 2012; and (2) to identify important survival predictors of COPD patients.

Methodology

This is a retrospective study that included COPD patients who participated in PRP in KH from 2003 to 2012. Mortality data and their causes of death were identified from Clinical Management System and Clinical Data Analysis and Reporting System as on 30 August 2016. Baseline demographic data and PRP-related factors that might predict better survival were retrieved: gender, use of long term oxygen therapy, lung function (predicted FEV1 and FVC), activities of daily living (ADL) level, Monitored Functional Task Evaluation score (MFTE), Chronic Respiratory Disease Questionnaire scores, and the PRP completion rate. Median survival was calculated by Kaplan-Meier analysis. Cox-proportional regression model was used to explore factors that predict better survival. Using the most significant predictors as strata, their respective effects on survival function were analysed with Kaplan-Meier analysis again.

Results

348 COPD patients participated in PRP in KHRMD. The mean age of this cohort was 72.3, with a median survival of 4.1 years (95% CI 3.6–4.5). About 73% of them died of non-cancer related respiratory causes. The median survival was 4.8 years (95% CI 3.6–6.0) and 3.6 years (95% CI 2.8–4.3) for patients aged <72 and aged ≥72 respectively. For patients aged <72, ADL was a significant survival predictor ($p=0.035$). The median survival for patients with Moser's ADL score ≥7 and <7 were 5.3 years (95% CI 4.2–6.3) and 3.1 years (95% CI 1.1–5.1) respectively. For patients aged ≥72, their MFTE score assessed on admission significantly predicted survival ($p<0.001$). The median survival for those having MFTE score ≥17 and <17 were 5.0 years (95% CI 4.2–5.7) and 2.2 years (95% CI 1.5–2.9) respectively.

Conclusion

The most important predictors for survival are ADL level for younger patients (aged <72) and MFTE score for older patients (aged ≥72) respectively.

F8.4
Young HA Investigators Presentations
14:30 Room 421

A Cluster-wide Patient Safety Programme in Reducing the Number of Models of Oxygen Regulators and Enhancing Staff Competency on Their Use

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Introduction

Since 2011, a number of incidents related to intra-hospital transfer of patients required oxygen therapy were reported. Among these incidents, most of them were related to misuse of oxygen regulators. A knowledge gap in monitoring of flowmeter was noted. On the other hand, a stock taking exercise in February 2014 showed that there were 44 models of oxygen regulators being used in the New Territories West Cluster (NTWC). In view of this, a NTWC Workgroup on Standardisation of Oxygen Regulators was formed by Nursing Services Division, Quality and Safety Division and Procurement Materials and Management Unit in June 2014 to explore ways to reduce the potential risks and enhance patient safety and staff competency.

Objectives

To enhance patient safety by reducing the number of models of oxygen regulators and enhancing staff competency in the use of oxygen regulators.

Methodology

A stock taking exercise was conducted in February 2014 to understand the number of models of oxygen regulators in the NTWC. Two models were identified as the standard models for purchase and use in the NTWC. In June 2014, all clinical wards were invited to select their preferred models for replacement. Support from the hospital management was sought and funding for replacement was approved in December 2014. A one-for-one replacement exercise was carried out between April and July 2015. All NTWC staff who required handling portable oxygen cylinders, managing oxygen regulators and transferring patients had to complete an online training course with quiz. A bilingual cue card was also produced to facilitate staff in using the oxygen regulators. The Workgroup would continuously monitor the purchase of oxygen regulators and training status in the NTWC.

Results

The one-for-one replacement exercise was completed in July 2015. The number of models of oxygen regulators was reduced from 44 to two and more than 600 oxygen regulators were replaced. Further, an online training system was launched in March 2015. Up till 30 June 2016, more than 3,600 staff had completed and passed the quiz. There was also no incident related to patient transfer with the use of oxygen regulators after the replacement exercise. Such good outcomes were presented orally in the International Health Federation's 40th World Hospital Congress in South Africa in November 2016.

Service Enhancement Presentations

F8.5

Young HA Investigators Presentations

14:30 Room 421

Aromatherapy (Inhalation) for Pain Management in Labour

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Introduction

Aromatherapy is the use of essential oils derived from aromatic plants for therapeutic purposes. It was first introduced to maternity care in the early 1990s. Researches have been done and revealed that the use of aromatherapy may shorten the duration of labour, and women had favourable self report on using aromatherapy to reduce anxiety, fear and pain.

Objectives

(1) To provide guidance for practicing aromatherapy safely and effectively; (2) to provide informed choice for women to cope with labour pain and (3) to promote positive experience in labour.

Methodology

Aromatherapy for low risk labouring women >37 weeks of gestation, as a labour pain relief method was launched in July 2015. In order to evaluate the effectiveness of the programme, both the maternal and baby outcomes were monitored. Moreover, maternal satisfaction was collected, via a Women's Satisfaction Survey after delivery.

Results

During the 18 months from July 2015 to December 2016, 645 women used aromatherapy as labour pain relief. It accounted for 8.7% over total deliveries of 7,389. Among the cases using aromatherapy, no significant adverse maternal and baby outcomes was noted.

From the feedback of women, 171 women (26.5%) reported lesser pain after using aromatherapy, while 28 (4.3%) expressed that it was very useful for relieving labour pain and 138 (21.4%) expressed that the effect was moderate. Moreover, 57 (8.8%) women commented that it was very useful for alleviating anxiety as well as 60 (9.3%) women reported that it was very useful for relaxation. Majority of women, 470 (72.9%) would like to use aromatherapy again for her next pregnancy, while 497 (77.1%) women would recommend aromatherapy to other pregnant women.

Outcome

Aromatherapy as a non-pharmacological pain relief method is valuable for labour pain relief. As a novice in aromatherapy, there is a long way ahead. Meanwhile, there are still some limitations in the programme. After reviewing available evidence and consulting an expert aromatherapist who is the principal of a local College of Professional Aromatherapy, we started with a limited choices of essential oils including Neroli (*Citrus aurantium* var. *amara*), Sweet Orange (*Citrus aurantium* var. *sinesis*), and Bergamot (*Citrus bergamia*). Moreover, we use the inhalation method only.

In future, to enhance the effect, more varieties of essential oils and methods in use could be considered. Of course, more training, especially on the effects and safety precautions on various essential oils should be conducted to all staff members beforehand.

F8.6

Young HA Investigators Presentations

14:30 Room 421

The Impact of Structured Pharmacist Counseling on Adherence and Knowledge of Patients on Oral Chemotherapy

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Introduction

Overseas studies had revealed the issue of non-adherence among patients on oral chemotherapy which could lead to life-threatening outcome. These studies further indicated the positive impact of structured and regular pharmacist counseling service on patient's adherence to oral chemotherapies.

Objectives

To evaluate the impact of structured pharmacist counseling on adherence, knowledge and pharmaceutical care of patients newly initiated with oral chemotherapy.

Methodology

This study is a prospective, single-centre randomised control trial. Subjects in the intervention group received structured counseling sessions provided by pharmacist before each treatment cycle. The control group received standard single pharmacist counselling session before the first treatment cycle. A modified version of Morisky Medication Adherence Scales-4 (MMAS-4) was used to evaluate the adherence of subjects to their oral chemotherapy. Any positive answer to the four questions in modified MMAS-4 was considered as non-adherence. Furthermore, phone number for emergency in pharmacist consultation service was offered to all subjects if needed.

Results

98 patients were included in the study. Three months after the initiation of oral chemotherapy, the non-adherence rate of intervention group and control group were found to be 8.2% and 38.8% respectively ($p=0.018$). A total of 68 calls were received via the phone number for emergency in pharmacist consultation service and 31.0% of subjects were referred to doctors for further management. The total number of visits to Accident and Emergency Department was 16 in the control group and eight in the intervention group ($p=0.015$). Regarding patient's knowledge on drug treatment, the percentage of subjects possessing knowledge on vomited dose management (intervention group 71.4% vs control group 6.1%, $p<0.0001$) and missed dose management (intervention group 59.2% vs control group 18.4%, $p<0.0001$) was found to be significantly improved with the intervention.

Service Enhancement Presentations

F8.7

Young HA Investigators Presentations

14:30 Room 421

Analysis on the High Risk Factors for Elderly Fall in Hospital Settings

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Introduction

Fall was one of the major causes of morbidity and mortality in older people (Ching et al., 2013). For elderly aged more than 65 years old in Hong Kong, the prevalence of fall was as high as 19.3-20% (Chu, Chi & Chiu, 2005) (Fong, Siu, Yeung, Cheung & Chan, 2011). Previous research showed that about one out of five fallers needed to seek medical attention and one out of 10 resulted in a fracture (Gillespie et al., 2012).

Objective

To analyse the potential high fall risk factors from the fall assessment conducted by occupational therapists (OT).

Methodology

This was a retrospective clinical review. 6,735 cases from acute wards (89%), rehabilitation wards (10%) and geriatric day hospital (0.2%) were referred to OT for fall assessment during January 2015 to September 2016. The fall assessment consisted of two 20-item checklists evaluate environmental hazards and identify any risky behaviours. Modified Barthel Index (MBI) was conducted in addition.

Results

Among the 6,735 cases, the proportions of male and female were 50.5% and 49.5% respectively. The mean age was 77.93 and the mean MBI score was 48.2.

As revealed by independent t-test, male demonstrated significantly more risk-taking behaviour than female ($t=8.651$, $p<0.001$). Pearson's r Analysis showed a positive correlation between age and fall risk ($r=0.03$, $p=0.013$), which indicated that fall risk was increasing with age. With the use of One-Way ANOVA, it was found that those who scored 21-60 in MBI posed the highest fall risk ($F=403.421$, $p<0.001$).

At the same time, five most common risky behaviours were identified: Not seeking for help when need (40.2%), unsafe transfer (39.2%), performing activities beyond abilities and limits (32.0%), sudden/hurry pace transfer (22.2%) and not complying with staff's safety advice and instructions (21.6%).

Findings showed that those with MBI score between 21 and 60, which meant requiring moderate assistance in activities of daily life (ADL), demonstrated the highest fall risk. More risky behaviour and hence higher fall risk was noted in male and advancing age. This implied that ADL training is one of the essential components in fall preventive intervention. Future OT development may focus on tailor-made training that target risky behaviours. Intensive training for cases who scored 21-60 in MBI may reduce the frequency of fall in elderly.