

Hong Kong Primary Care Conference 2013



# INNOVATIONS IN PRIMARY CARE



Hong Kong  
Primary Care  
Conference  
The Hong Kong College  
of Family Physicians

16 JUNE, 2013 (SUN)

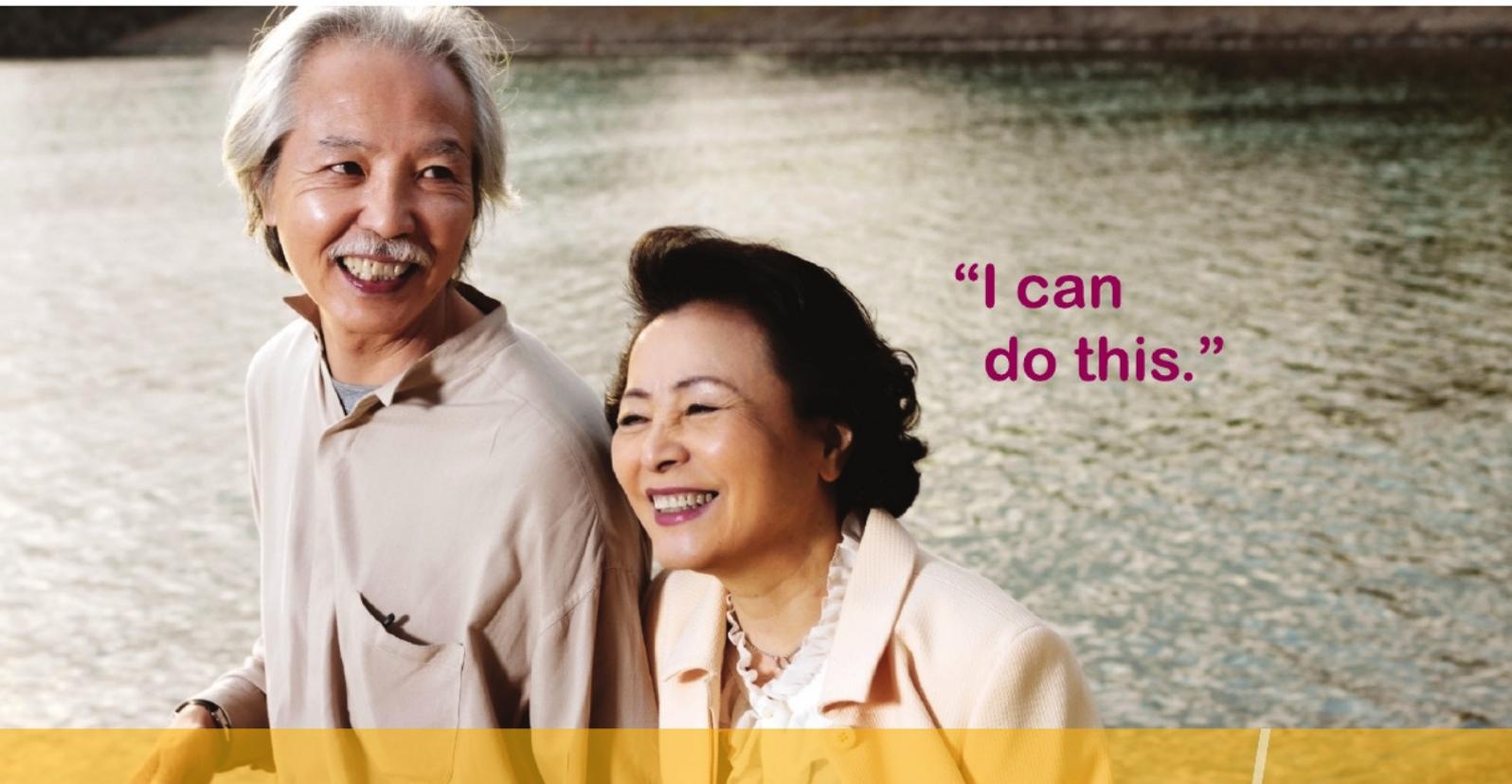
## PROGRAMME BOOK



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References

1. Ignaut DA, Schwartz SL, Sarwat S and Murphy HL. *Diabetes Educ* 2009;35:789-798.
2. Ignaut DA, Opincar M and Lenox S. *J Diabetes Sci Technol* 2008;2:533-537.

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## WELCOME MESSAGE



Dear colleagues and friends,

On behalf of the Organizing Committee, we are delighted to welcome you all to the 3<sup>rd</sup> Hong Kong Primary Care Conference (HKPCC) held on 16<sup>th</sup> June 2013.

This is very exciting indeed as our theme this year “Innovations in Primary Care” is a timely celebration of family medicine witnessing the growth and consolidation of our discipline through discovery and delivery of new health care models and services. Over the years, our conference has proven to be a stimulating platform for bringing together over 300 international experts, family physicians, dentists, nurses and allied health practitioners to promote collaborative and networking opportunities in addressing present and future challenges. It offers a fertile environment for sharing latest scientific updates, research activities as well as open exchange of experiences and views on recent developments and trends in primary care.

This year the programme entails a few “innovations” too: To allow greater participation for busy practitioners, we have changed from a two-day programme to one full-day conference; we have introduced the Best Oral and Poster Competitions and Novice Researcher’s Award. In addition, the programme features exciting blends of plenary sessions, workshops, seminars, research forum, clinical case and free paper presentations as well as poster displays which are not only from medical doctors but also from our nursing and allied health practitioners. Building upon the successful “Clinical Case Presentation Competition” from last year, which aims to highlight interesting and challenging cases encountered in primary care, we are hosting this competition again to encourage multi-disciplinary involvement and innovative ideas.

We would like to take this opportunity to express our sincere appreciation to all the speakers and facilitators for their valuable support; various sponsors for their generous sponsorship, and all the hardworking members of the Organizing Committee and Conference Secretariats for their commitment towards this event and making it a success.

We are confident that this conference will again be a fruitful and memorable experience for you all.



**Dr. Lorna NG**



**Dr. William WONG**

Co-Chairmen, Organizing Committee  
Hong Kong Primary Care Conference 2013

## ORGANIZING COMMITTEE

Chairperson : **Dr. Lorna NG**

Chairperson &  
Scientific Subcommittee Coordinator : **Dr. William C.W. WONG**

Advisors : **Dr. Ruby S.Y. LEE**

**Dr. Gene W.W. TSOI**

Business Manager : **Dr. Daniel W.S. CHU**

Scientific Subcommittee Coordinator : **Dr. Colman S.C. FUNG**

Venue Coordinator &  
Scientific Subcommittee Member : **Dr. Lap Kin CHIANG**

Scientific Subcommittee Member : **Dr. Catherine X.R. CHEN**

Publication Coordinators : **Dr. Judy G.Y. CHENG**

**Dr. Dana S.M. LO**

Clinical Case Presentation Competition Coordinators : **Dr. Kevin B.Y. FOO**

**Dr. Yu KWAN**

Committee Members : **Dr. Man Yuk CHONG**

**Dr. Wendy W.Y. KWAN**

**Dr. Vienna C. W. LEUNG**

Nurse Planners : **Ms. Samantha Y.C. CHONG**

**Prof. Wan Yim IP**

**Ms. Margaret C.H. LAM**

Conference Secretariat : **Ms. Erica M. SO**

**Ms. Alky H.K. YU**

**Ms. Crystal W.Y. YUNG**

## MESSAGE FROM PRESIDENT



Primary care is the work of healthcare professionals who act as a first point of consultation for all patients. Central to the concept of primary care is the patient. It involves the widest scope of health care, including all ages of patients, patients of all socioeconomic groups, patients seeking to maintain optimal health, and patients with all manners of acute and chronic physical, mental and social health issues, including multiple chronic diseases.

Family physicians provide not only services commonly recognized as primary care, but are also coordinators of our patients' overall health care. Primary care provider includes the primary care physicians, other physicians who include some primary care services in their practices, and some non-physician providers. Collaboration among providers is of utmost importance to primary care.

This year, the organizing committee has chosen "Innovations in Primary Care" as the main theme of the conference, highlighting innovations in education, research and healthcare delivery in primary care. The Conference will allow open exchange of experiences and views on the latest developments in primary care among different disciplines to provide insight into our future practice.

Last but not least, I would like to thank our sponsors for their support, our organizing committee and secretariat for their hard work to make this Conference possible.



**Dr. Ruby S.Y. LEE**  
President  
The Hong Kong College of Family Physicians

## CONGRATULATORY MESSAGE



Primary care plays a pivotal role in our healthcare system. By providing accessible primary care services that is comprehensive, continuing and person-centered, we can improve the health conditions of the community and promote better utilisation of resources.

Having regard to an ageing population and the increasing demand for healthcare services, the Administration published in 2010 the Strategy Document on Primary Care Development in Hong Kong setting out major strategies to further enhancing the primary care provision in the community. We also promulgated reference frameworks for specific diseases in 2011 and population groups in 2012. The launch of the Primary Care Directory since April 2011 also provides a useful tool for members of the public to find information regarding family doctors in their vicinity.

Over the years, the Hong Kong College of Family Physicians has been taking up a crucial role in enhancing and developing family medicine in Hong Kong through organising training courses and encouraging continuing education. The Hong Kong Primary Care Conference 2013 organised by the College provides a very useful platform which brings together experts, clinicians and healthcare professionals for exchange of experiences and views on the latest practices and developments in the field of family medicine. With the theme of “Innovations in Primary Care”, I look forward to hearing new thoughts and creative ideas in enhancing primary care.

**Dr. KO Wing Man, BBS, JP**  
Secretary for Food and Health, HKSARG

## CONGRATULATORY MESSAGE



On behalf of the Hong Kong Academy of Medicine, it gives me great pleasure to extend our heartiest congratulations to you on the organization of the Hong Kong Primary Care Conference 2013 (HKPCC 2013).

Primary Care in the city has been gaining recognition by the Hong Kong public over the past few years as the community began to appreciate the concept of having trained and qualified professionals in family medicine providing comprehensive care, whole person care to patients on a continuous basis, whilst playing a coordinating role in organizing specialized health care.

The demands on the primary healthcare professionals have increased and will continue to rise in the years to come. Among the 15 Colleges of the Hong Kong Academy of Medicine, the numbers of Fellows under Colleges like the Community Medicine, Emergency Medicine, Family Physicians, and Physicians who provide primary care services are the fastest growing ones. However, the demands for such specialist medical practitioners will continue to rise as a result of factors such as patient expectations for quality care, the aging population with more chronic illnesses and the rising trend of part time practice among the younger generations of doctors. In many places, primary healthcare teams led by medical doctors are transforming into multi-disciplinary teams which include nurse practitioners and other allied health professionals and therapists.

The HKPCC 2013 is a great platform for exchange of expertise in the field of primary care and sharing of knowledge in the latest developments and world trends. May I wish the Organizing Committee a successful Conference and wish all the participants a fruitful gathering. To the overseas delegates, I wish you a most pleasant stay in our vibrant city!

With warmest regards,



**Dr. Donald K.T. LI**  
President  
Hong Kong Academy of Medicine



## CONGRATULATORY MESSAGE

It is with great pleasure that I send this congratulatory message to the Hong Kong College of Family Physicians (HKCFP) on the Primary Care Conference 2013, which provides a nice platform to exchange innovations in patient care, in training and in research, and to share experiences and views on the developments in primary care.

With an ageing population and a growing number of people with chronic diseases and functional needs, we see a pressing need for health care that is organized around the concepts of prevention and for an environment that initiates and supports patients' self-management behavior. We need a strong primary care system with re-orientation towards provision of more comprehensive and community-based care.

The HKCFP all along takes an active role to promote and develop good quality family medicine practice for the community of Hong Kong, and is a close partner of the Primary Care Office (PCO) of the Department of Health in promoting primary care and the family doctor concept. I wish to take this opportunity to express our sincere gratitude to HKCFP for their valuable support and contributions in the various areas of work in developing and enhancing primary care in Hong Kong.

The changing face of medicine makes innovation and collaboration ever more important. I wish to congratulate the HKCFP for their excellent work in organizing the Primary Care Conference on "Innovations in Primary Care". On behalf of all of us at the PCO, best wishes for a successful Conference!

**Dr. Emily C.M. LEUNG**  
Head, Primary Care Office  
Department of Health, HKSARG

## CONGRATULATORY MESSAGE



Many congratulations to the Hong Kong College of Family Physicians for hosting the third Hong Kong Primary Care Conference (HKPCC). It is a visionary achievement of the Hong Kong College of Family Physicians to establish the HKPCC as an annual forum for knowledge exchange among primary care providers. The scientific programme of the 2013 HKPCC reflects the diversity and whole-person focus of primary care, with contributions from not only doctors but also other health professionals including nurses, pharmacists, occupational therapist, physiotherapists and psychosocial professionals. The HKPCC provides a platform for the dissemination of research and best practice in primary care. I am most glad to find many presentations on research by practicing family doctors because research is the foundation for the advances of a scientific discipline. I look forward to an educational conference that will enrich the concepts, knowledge and skills of primary care further.



**Prof. Cindy L.K. LAM**

Danny D. B. Ho Professor in Family Medicine

Head, Department of Family Medicine and Primary Care

The University of Hong Kong



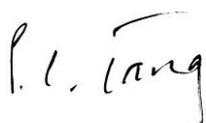
## CONGRATULATORY MESSAGE



I am delighted to send this message of good wishes to the Hong Kong Primary Care Conference 2013, organized by the Hong Kong College of Family Physicians.

Primary care forms the cornerstone of health care in the time chronic non-communicable disease is the major threat to human health and life. While we are being fascinated with increasing new “advanced furniture and interior decorations”, it is time again to assess the very foundation of the building of health care. With innovation and dedication to which the Conference is rightly committed, we can keep improving our services for the community. I am confident that the Hong Kong Primary Conference will continue to be an important platform for generating and sharing ideas and contributing to the improvement of primary care in the region and worldwide.

I congratulate the Hong Kong College of Family Physicians and the Organizing Committee for taking on this grand mission and wish the delegates at this conference every success in their deliberations.

A handwritten signature in black ink that reads "P. L. Tang".

**Prof. TANG Jin Ling**

MD PhD FFPH

Acting Director and Professor of Epidemiology

JC School of Public Health and Primary Care

The Chinese University of Hong Kong

## CONFERENCE INFORMATION

**Organized by:** The Hong Kong College of Family Physicians  
**Date:** 16 June 2013 (Sunday)  
**Venue:** Hong Kong Academy of Medicine Jockey Club Building,  
 99 Wong Chuk Hang Road, Aberdeen, Hong Kong  
**Official Language:** English

**CME/ CPD / CNE Accreditation:**

### Accreditation for HKPCC 2013

College/Programme	16/6/2013 Whole Day	CME/CPD Category
Anaesthesiologists	7.5	Non-ANA
Community Medicine	6	
Dental Surgeons	7.5	Cat. B
Emergency Medicine	6	PP
Family Physicians	5 (+1 for attending symposium)	Cat. 4.4
MCHK CME Programme	5	Passive
Occupational Therapists	3	
Obstetricians & Gynaecologists	5	Non-OG
Ophthalmologists	3.5	Passive
Orthopedic Surgeons	Nil	
Otorhinolaryngologists	4	Cat. 2.2
Paediatricians	6	Cat A
Pathologists	4	PP
Physicians	3.5	
Physiotherapists	5	1C
Podiatrists	10	
Prosthetist-Orthotists	5	Cat C.1
Psychiatrists	6	PP/OP
Radiologists	7.5	Cat. B
Surgeons	6	Passive
CNE	5	

**Conference Secretariat**

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 Fax No. : (852) 2866 0616  
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 Contact Person : Ms. Erica SO, Ms. Crystal YUNG & Ms. Alky YU  
 Contact Person for CPD / CNE : Ms. Yvonne LAM

## ACKNOWLEDGEMENT

The organizing committee wishes to express our most sincere thanks to all parties who have helped to make the Hong Kong Primary Care Conference 2013 a successful one.

### Officiating Guests

**Dr. KO Wing Man, BBS, JP**

Secretary for Food and Health, HKSARG

**Prof. Cindy L.K. LAM**

Danny D B Ho Professor in Family Medicine;  
Head, Department of Family Medicine and Primary Care,  
The University of Hong Kong

**Prof. Gabriel M. LEUNG, JP**

Professor and Head, Department of Community Medicine,  
The University of Hong Kong

**Prof. TANG Jin Ling**

Acting Director and Professor of Epidemiology,  
The Jockey Club School of Public Health and Primary Care,  
The Chinese University of Hong Kong

**Prof. Doris YOUNG**

Professor and Chair of General Practice, Melbourne Medical School;  
Associate Dean Academic, Faculty of Medicine, Dentistry and Health Sciences,  
The University of Melbourne

**Mr. Richard M.F. YUEN, JP**

Permanent Secretary for Food and Health (Health),  
Food and Health Bureau, HKSARG

### Plenary Speakers

**Dr. Summer C.K. CHAN**

Deputising Senior Health Informatician (eHealth Record and Special Clinical Projects)  
Hospital Authority

**Ms. Ida B.S. LEE**

Deputy Head (eHealth Record)  
eHealth Record Office, Food and Health Bureau, HKSARG

**Prof. Gabriel M. LEUNG, JP**

Professor and Head, Department of Community Medicine,  
The University of Hong Kong

**Prof. Doris YOUNG**

Professor and Chair of General Practice, Melbourne Medical School;  
Associate Dean Academic, Faculty of Medicine, Dentistry and Health Sciences,  
The University of Melbourne

**Mr. Richard M.F. YUEN, JP**

Permanent Secretary for Food and Health (Health),  
Food and Health Bureau, HKSARG

**Workshop Speakers**

**Dr. Andy K.Y. CHEUNG**  
Specialist in Family Medicine

**DM RAMP Team**  
Department of Family Medicine and Primary Health Care,  
Hong Kong East Cluster (HKEC), Hospital Authority

**Dr. Stanley K.H. LAM**  
(Faculty: Dr. CHAU Chi Hong, Dr. Andrew IP, Dr. Paco LEE, Dr. NG Tse Kin,  
Dr. Allen NGAI, Dr. Winnie WONG and Dr. Ricky WU)  
Specialists in Family Medicine

**Seminar Speakers**

**Dr. CHIN Weng Yee**  
Assistant Professor, Department of Family Medicine & Primary Care,  
The University of Hong Kong

**Dr. Stanley K.H. LAM**  
Specialist in Family Medicine

**Dr. Henry C.K. SZE**  
Clinical Assistant Professor, Department of Clinical Oncology,  
The University of Hong Kong

**Dr. Martin C.S. WONG**  
Director, CUHK Jockey Club Bowel Cancer Education Centre;  
Associate Professor, School of Public Health & Primary Care,  
Faculty of Medicine, The Chinese University of Hong Kong

**Prof. Doris YOUNG**  
Professor and Chair of General Practice, Melbourne Medical School;  
Associate Dean Academic, Faculty of Medicine, Dentistry and Health Sciences,  
The University of Melbourne

**Symposia Speakers**

**Dr. Daniel W.S. CHU**  
Specialist in Family Medicine;  
Chief of Service, Department of Family Medicine and Primary Healthcare,  
Hong Kong East Cluster, Hospital Authority

**Prof. Ronald C.W. MA**  
Professor, Department of Medicine & Therapeutics, School of Biomedical Sciences,  
The Chinese University of Hong Kong

**Judges of Clinical Case Presentation Competition**

**Prof. IP Wan Yim**

Associate Professor, The Nethersole School of Nursing,  
The Chinese University of Hong Kong

**Dr. Luke C. Y. TSANG**

Specialist in Family Medicine

**Ms. Selina L.Y. WAN**

Department Manager, Occupational Therapy Department,  
Kwong Wah Hospital

**Mr. Edwin C.M. WU**

Senior Physiotherapist;  
Hon Department Manager, Physiotherapy Department,  
Prince of Wales Hospital

**Dr. WUN Yuk Tsan**

Specialist in Family Medicine

**Judges of Full and Novice Paper Competition**

**Dr. Antonio A.T. CHUH**

Specialist in Family Medicine

**Dr. Martin C.S. WONG**

Director, CUHK Jockey Club Bowel Cancer Education Centre;  
Associate Professor, School of Public Health & Primary Care,  
Faculty of Medicine, The Chinese University of Hong Kong

**Judges of Free Paper Competition – Oral Presentation**

**Dr. Ruby S.Y. LEE**

President, The Hong Kong College of Family Physicians

**Prof. Samuel Y.S. WONG**

Associate Director (Undergraduate Education), JC School of Public Health and Primary Care;  
Head, Division of Family Medicine and Primary Healthcare,  
The Jockey Club School of Public Health and Primary Care, The Chinese University of Hong Kong

**Judges of Free Paper Competition – Poster Presentation**

**Ms. Samantha Y.C. CHONG**

Chief Nursing Officer, Nursing Administration Office, Hong Kong Baptist Hospital

**Dr. LAU Ho Lim**

Vice President (General Affairs), The Hong Kong College of Family Physicians

**Secretarial Support**

**Ms. Erica M. SO / Ms. Alky H.K. YU / Ms. Crystal W.Y. YUNG**  
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CME/CPD/CNE Accreditation Facilitator

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# PROGRAMME



## Hong Kong Primary Care Conference 2013 "Innovations in Primary Care"

Date		16 June 2013 (Sun)		
Time				
08:15 - 09:00		<b>Registration - G/F Exhibition Hall</b>		
8:30 - 10:25	<b>Clinical Case Presentation Competition</b>	<i>Lim Por Yen (G/F)</i>	Various Teams / Presenters	
9:00 - 10:25	<b>Seminar A</b>	<i>Rm 803-4</i>	Lower Limb Biomechanics in Daily Practice	Dr. LAM King Hei, Stanley (Specialist in Family Medicine)
	<b>Workshop 1</b>	<i>Rm 903-4</i>	Psychological Treatment for Depression: Is Evaluating and Challenging Automatic Negative Thoughts Enough?	Dr. CHEUNG Kit Ying, Andy (Specialist in Family Medicine)
10:30 - 11:00	<b>Opening Ceremony and Prize Presentations - G/F Pao Yue Kong Auditorium</b>			
11:00 - 11:45	<b>Plenary I</b>	<i>Pao Yue Kong (G/F)</i>	Driving Innovation in Primary Care Research	Prof. Doris YOUNG (Professor & Chair of General Practice, Melbourne Medical School; Associate Dean Academic, Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne)
11:45 - 12:30	<b>Plenary II</b>	<i>Pao Yue Kong (G/F)</i>	Primary Care Models - Let a Hundred Flowers Bloom	Prof. Gabriel M. LEUNG, JP (Professor and Head, Department of Community Medicine, The University of Hong Kong)
12:30 - 13:30	<b>Lunch Symposium</b>	<i>Run Run Shaw Hall (1/F)</i>	<u>Optimizing T2DM Management in Clinical Practice</u>	Prof. MA Ching Wan, Ronald (Professor, Department of Medicine & Therapeutics, The Chinese University of Hong Kong; Honorary Consultant, the Prince of Wales Hospital)
			New Approach to T2DM Management From Theoretical Benefit to Real Life Experience : Use of DPP4-Inhibitor at Primary Care	Dr. CHU Wai Sing, Daniel (Specialist in Family Medicine; Chief of Service, Department of Family Medicine and Primary Healthcare, Hong Kong East Cluster, Hospital Authority)
13:30 - 14:30	<b>Plenary III</b>	<i>Pao Yue Kong (G/F)</i>	eHealth Record Sharing in Hong Kong	Mr. YUEN Ming Fai, Richard, JP (Permanent Secretary (Health) of Food & Health Bureau)
				Ms. LEE Bk Sai, Ida (Deputy Head, eHealth Record, eHealth Record Office, Food & Health Bureau)
				Dr. CHAN Chi Keung, Summer (Deputising Senior Health Informatician (eHealth Record and Special Clinical Projects), Hospital Authority)
14:30 - 16:00	<b>Workshop 2 - Part I</b>	<i>James Kung (2/F)</i>	Hands-on Workshop on Diagnostic Musculoskeletal Ultrasound	Dr. LAM King Hei, Stanley (Faculty: Dr. CHAU Chi Hong, Dr. Andrew IP, Dr. Parco LEE, Dr. NG Tse Kin, Dr. Allen NGAI, Dr. Winnie WONG & Dr. Ricky WU) (Specialists in Family Medicine)
	<b>Workshop 3 - Part I</b>	<i>Run Run Shaw Hall (1/F)</i>	Embarking on a Journey with Diabetic Patients: Use of Diabetes Conversation Map™ as An Innovative Approach in Patient Care	DM RAMP Team (Department of Family Medicine and Primary Health Care, Hong Kong East Cluster (HKEC), Hospital Authority)
	<b>Free Paper Presentation - Part I</b>	<i>Lim Por Yen (G/F)</i>	Various Speakers	
	<b>Seminar C - Part I</b>	<i>Rm 803-4</i>	Research Presentation	Prof. Doris YOUNG (Professor & Chair of General Practice, Melbourne Medical School; Associate Dean Academic, Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne)
Dr. WONG Chi Sang, Martin (Associate Professor, School of Public Health and Primary Care, Faculty of Medicine, The Chinese University of Hong Kong)				
Dr. CHIN Weng Yee (Assistant Professor, Department of Family Medicine and Primary Care, The University of Hong Kong)				
16:00 - 16:30	<b>Poster Presentation - 1/F Foyer &amp; Coffee Break - G/F Exhibition Hall</b>			
16:30 - 17:30	<b>Workshop 2 - Part II</b>	<i>James Kung (2/F)</i>	Hands-on Workshop on Diagnostic Musculoskeletal Ultrasound	Dr. LAM King Hei, Stanley (Faculty: Dr. CHAU Chi Hong, Dr. Andrew IP, Dr. Parco LEE, Dr. NG Tse Kin, Dr. Allen NGAI, Dr. Winnie WONG & Dr. Ricky WU) (Specialists in Family Medicine)
	<b>Workshop 3 - Part II</b>	<i>Run Run Shaw Hall (1/F)</i>	Embarking on a Journey with Diabetic Patients: Use of Diabetes Conversation Map™ as An Innovative Approach in Patient Care	DM RAMP Team (Department of Family Medicine and Primary Health Care, Hong Kong East Cluster (HKEC), Hospital Authority)
	<b>Free Paper Presentation - Part II</b>	<i>Lim Por Yen (G/F)</i>	Various Speakers	
	<b>Seminar B</b>	<i>Pao Yue Kong (G/F)</i>	New Treatment in Oncology	Dr. SZE Chun Kin, Henry (Assistant Clinical Professor, Department of Clinical Oncology, The University of Hong Kong)
<b>Seminar C - Part II</b>	<i>Rm 803-4</i>	Research Presentation	Prof. Doris YOUNG (Professor & Chair of General Practice, Melbourne Medical School; Associate Dean Academic, Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne)	
			Dr. WONG Chi Sang, Martin (Associate Professor, School of Public Health and Primary Care, Faculty of Medicine, The Chinese University of Hong Kong)	
			Dr. CHIN Weng Yee (Assistant Professor, Department of Family Medicine and Primary Care, The University of Hong Kong)	

**Disclaimer**

Whilst every attempt will be made to ensure all aspects of the conference mentioned will take place as scheduled, the Organizing Committee reserves the right to make changes to the programme without notice as and when deemed necessary prior to the Conference.

# ABSTRACTS OF PLENARY LECTURES

## PLENARY LECTURE 1



### *“Driving Innovation in Primary Care Research”*

**Prof. Doris YOUNG**

*MBBS (Melb) MD (Melb) FRACGP*

*Professor and Chair of General Practice, Melbourne Medical School;*

*Associate Dean Academic,*

*Faculty of Medicine, Dentistry and Health Sciences,*

*University of Melbourne*

Primary care research is gathering momentum world wide as the population is ageing and there are more people with chronic illnesses and co-morbidities living in the community and are cared for by a multidisciplinary team. New innovative models of care have to be developed, trialled in order to effect change and improve health outcomes. Health policy makers are increasingly concerned about cost effective treatment, evidence based medicine and most important of all, whether the health dollar can be equitably distributed.

Recent social and economic changes have resulted in health disparities, low health literacy and vulnerable groups in our communities. Innovative research and new modes of enquiry have to occur in primary care in order to improve health outcomes for those most in need. New discoveries and modalities of treatment have to be translated to service delivery and be properly evaluated. More emphasis on adopting research methodologies such as case studies, longitudinal observational studies and consumer engagement are needed in order to gather more empirical information to effect change. Preventative health research will need more prominence to decrease development of non communicable chronic diseases. With the increasing uptake of communication technologies such as mobile phones, internet, more research should be focused on inter professional communication, sharing of medical information to enhance patient self management via patient controlled health record. The need for continuity of care and a ‘medical home’ is never more evident to enable a co-ordinated and integrated care approach to whole person care.

However, in order to engage in innovative research to meet health needs of the community, primary care professionals need to gain research skills, universities need to provide research platforms such as statistical and sociological research support in order to build research capacity for the workforce. Finally, innovative research funding models need to be available to advance primary care research.

# ABSTRACTS OF PLENARY LECTURES

## PLENARY LECTURE 2



### *“Primary Care Models – Let a Hundred Flowers Bloom”*

**Prof. Gabriel M. LEUNG, JP**

*MD (W Ont), MPH (Harvard), MD (HK), FCFP (Canada), FFPH (UK),  
FRCP (Edin), FHKCCM, FHKAM (Community Medicine)  
Professor and Head, Department of Community Medicine,  
The University of Hong Kong*

The contrast between the eventualities of the 1985 Scott Report and the 1990 Working Party on Primary Health Care Report could not have been more stark. The World Health Organisation reminded member states, through the 2008 World Health Report Primary care: now more than ever, to put into action what had been declared in Alma Ata 30 years ago. Twenty years after the Working Party report, the Government finally set out more concrete directions for primary care development in a 2010 Strategy Document. The time has come to execute those ideals and to turn rhetoric into reality.

An evolutionary, evaluative approach that recognises real politik would be preferred over a system-wide revolution. The various pilot schemes involving direct provision/subvention (in the form of community health centres), outsourcing (whether wholesale as in the Tin Shui Wai model or by disease condition as for hypertension and diabetes) and vouchers (elderly and vaccine programmes) could be expanded to experiment with other different models of service delivery. These may include the American “medical home”, Australia’s medicare locals, Britain’s general practice with commissioning responsibilities or the Ontario blended family health models, amongst other innovative forms.

An equally important priority would be to understand and work with the contextual circumstances of existing primary care providers. The politico-economic ecology of private ambulatory care, which provides 80% of services, has undergone substantial changes recently that need to be accounted for when planning reform.

Primary care reform should no longer remain an afterthought or at best paid lip service. It should be allowed to experiment, be evaluated and implemented – now more than ever.

## ABSTRACTS OF PLENARY LECTURES

### PLENARY LECTURE 3

#### *“eHealth Record Sharing in Hong Kong”*



#### *“eHealth Record and Healthcare Improvement : Vision and Challenge”*

**Mr. Richard M.F. YUEN, JP**  
*Permanent Secretary for Food and Health (Health),  
Food and Health Bureau, HKSARG*

Apart from an update on the programme’s latest development, Mr. YUEN will share with us the Government vision on eHR sharing, as well as the challenges for developing a new infrastructure for health record sharing between the public and private healthcare sectors.



#### *“Rules and Principles adopted in the eHR Sharing System”*

**Ms. Ida B.S. LEE**  
*Deputy Head (eHealth Record)  
eHealth Record Office, Food and Health Bureau, HKSARG*

To instil public confidence in eHR sharing, the Government will formulate specific legislation to ensure privacy and data security. Ms. Ida LEE, Deputy Head (eHealth Record) of the Food and Health Bureau would explain to you the “Rules and Principles adopted in the eHR Sharing System”. Her talk will cover the proposed regulatory regime, the use of administrative Code of Practices as practical guidance, the workflow implications to healthcare providers, etc.



#### *“Creating User Friendly eHR Environment for Family Physicians”*

**Dr. Summer C.K. CHAN**  
*Deputising Senior Health Informatician  
(eHealth Record and Special Clinical Projects)  
Hospital Authority*

An user-friendly interface is of paramount importance to encourage healthcare provider’s participation in eHR sharing. As a medical practitioner, Dr. Summer CHAN, Deputising Senior Health Informatician (eHealth Record and Special Clinical Projects) of Hospital Authority would share his experience in "Creating User Friendly eHR Environment for Family Physicians". In addition to a brief introduction of the eHR technical infrastructure and the ways to connect to the eHR sharing platform, Dr CHAN will demonstrate the user-friendly interfaces of the eHR tools such as CMS On-ramp and the eHR Viewer.

# WORKSHOPS

## Workshop 1:

### Psychological Treatment for Depression: Is Evaluating and Challenging Automatic Negative Thoughts Enough?

Time: 09:00 – 10:25

#### Speaker

**Dr. CHEUNG Kit Ying, Andy**

*Specialist in Family Medicine*

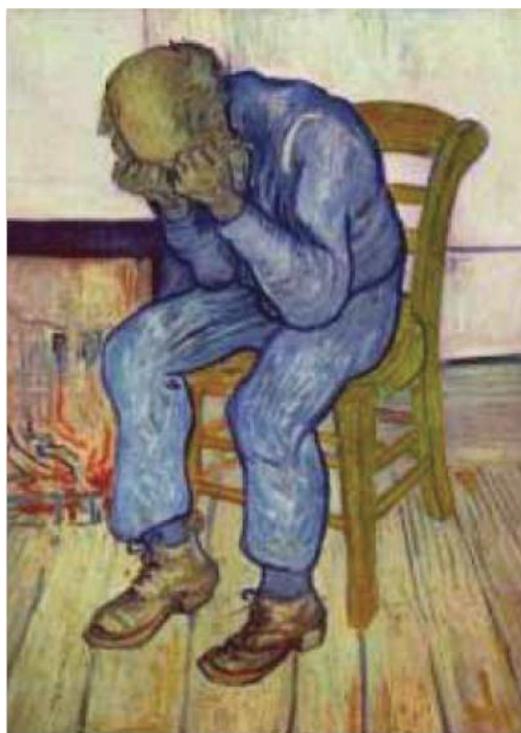
Despite evidences showing the effectiveness of cognitive behavioral therapy for patients suffering from depression, some people cast doubts as many of them carry the misconception that using this orientation would only dwell on challenging automatic negative thoughts and ignore the importance of therapeutic relationship, emotions and most importantly childhood/developmental experiences. In reality, apart from identifying automatic negative thoughts, evaluating and modifying intermediate (including rules, attitude and assumptions) and core beliefs (firmly held ideas about self and/or others) are essential strategies that may help patients to acquire long lasting changes and thus be able to prevent relapses.

It is hoped that through this workshop, participants may be able to understand the conceptual framework of the 3 levels of intervention and how these can be achieved.

The three levels are:

1. Automatic negative thoughts
2. Intermediate beliefs
3. Core beliefs

A depressed patient (background of this patient will be provided during the workshop) will be used for illustration/demonstration.



# WORKSHOPS

## Workshop 2:

### Hands-on Workshop on Diagnostic Musculoskeletal Ultrasound

Time: Part I: 14:30 – 16:00  
Part II: 16:30 – 17:30

#### **Chief Speaker**

**Dr. LAM King Hei, Stanley**

#### **Faculty:**

Dr. CHAU Chi Hong, Dr. IP Kit Kuen, Andrew, Dr. LEE Wang Yat, Paco, Dr. NG Tse Kin, Dr. NGAI Ho Yin, Allen, Dr. WONG Sau Yee, Winnie and Dr. WU Wing Keung, Ricky  
*Specialists in Family Medicine*

This workshop aims to expand the attendees' horizon on musculoskeletal ultrasound and its booming application in medical practice.

After precise introduction and demonstration, hands-on scanning of live models will be led by experienced tutors with a 1:5 tutor to attendees' ratio. All Faculty are experienced tutors from HKIMM.



# WORKSHOPS

## Workshop 3:

### Embarking on a Journey with Diabetic Patients:

### Use of Diabetes Conversation Map™ as an Innovative Approach in Patient Care

Time: Part I: 14:30 – 16:00  
Part II: 16:30 – 17:30

#### Speakers

#### **DM RAMP Team**

*Department of Family Medicine and Primary Health Care,  
Hong Kong East Cluster (HKEC), Hospital Authority*

#### Introduction

Diabetes Conversation Map™ education tools were developed by Healthy Interactions in collaboration with the International Diabetes Federation (IDF), Eli Lilly and Company and other leading diabetes experts in 2008. The tools make use of the power of small group dialogue and collaborative learning to improve personal health management and enhance interactions between people with diabetes and healthcare professionals. The Conversation Map™ specifically target topics which are important for supporting successful diabetes self-management, including: ‘Living with Diabetes’, ‘How Diabetes Works’, ‘Healthy Eating and Keeping Active’ and ‘Starting Insulin’.



#### Objectives of workshop

This workshop will introduce the application and operation of Diabetes Conversation Map™ at primary health care setting.

#### The HKEC experience

The DM Ramp Team of HKEC has been conducting patient education groups using Diabetes Conversation Map™ at the General Out-Patient Clinics since August 2012. Until now, they have completed over 30 sessions and over 150 patients had participated.

#### Workshop Rundown

- Introduction to DM Conversation Maps ----- 20 minutes
- DM Conversation Maps and Motivational Interviewing -----15 minutes
- Video sharing -----30 minutes
- Introduction to different maps -----30 minutes
- Small group experiencing -----40 minutes
- Questions and Answers -----15 minutes

# SEMINARS

## Seminar A:

### Lower Limb Biomechanics in Daily Practice

Time: 09:00 – 10:25

#### Speaker

**Dr. LAM King Hei, Stanley**

*Specialist in Family Medicine*



This seminar aims to broaden the knowledge of attendees on lower limb biomechanics and enlighten the relationship of the lower limb biomechanical anomalies with musculoskeletal pain and bodily dysfunctions in other parts of the bodies. Live demonstration of lower limb biomechanical assessment will be performed during the seminar.

# SEMINARS

## Seminar B:

### New Treatment in Oncology

Time: 16:30 – 17:30

#### Speaker

**Dr. SZE Chun Kin, Henry**

*FHKAM (Radiology)*

*Clinical Assistant Professor, Department of Clinical Oncology,  
The University of Hong Kong*



Cancer treatment has undergone revolutionary changes in recent years. Thanks to the advance in technological development and basic biogenetic science research, new treatment paradigm and the optimal treatment strategy is continuously evolving. In radiation therapy, the invention of intensity-modulated radiotherapy and image-guided radiotherapy have dramatically improved the precision and accuracy of radiation dose delivery and allowed opportunity for better protection of normal tissue and radiation dose escalation. Tumors which, in the past might be considered incurable without invasive surgery, can now be treated by radically high dose radiation with a non-invasive approach while achieving a curative goal. For anti-cancer drugs, numerous targeted therapeutic agents are being added to the ever ending list of systemic agents with an amazing pace. Many experimental studies in the Petri dish and guinea pigs are now being successfully translated into human application and bring about exciting changes in daily clinical practice. Personalized medicine is no longer a dream. In many cancers, our treatment algorithms are now defined largely by the presence or absence of identifiable, clinically relevant mutations for which we may have a specific, effective, inhibitory therapy that leads to impressive and often prolonged responses.

# SEMINARS

## Seminar C:

### Research Presentation for Higher Trainees in Family Medicine

Time: Part I: 14:30 – 16:00  
Part II: 16:30 – 17:30

#### Moderators



**Prof. Doris YOUNG**  
*MBBS (Melb), MD (Melb),  
FRACGP*

*Professor and Chair of General  
Practice, Melbourne Medical  
School,  
Associate Dean Academic,  
Faculty of Medicine,  
Dentistry and Health Sciences,  
The University of Melbourne*



**Dr. WONG Chi Sang, Martin**  
*MBChB, MD, MPH,  
FHKAM (Fam Med)*

*Director, CUHK Jockey Club Bowel  
Cancer Education Centre;  
Associate Professor, School of  
Public Health & Primary Care,  
Faculty of Medicine, The Chinese  
University of Hong Kong*



**Dr. CHIN Weng Yee**  
*MBBS (UWA), FRACGP*

*Assistant Professor,  
Department of Family  
Medicine & Primary Care,  
The University of Hong  
Kong*

Research is an essential element in the development of any medical specialty. Among the multitudes of research performed, a proportion is conducted in primary care; nevertheless, in Hong Kong much of our primary care research only takes place within academic institutions. In 2011, research was introduced as a new exam segment, such that higher trainees can perform research as an alternative to the audit segment. In order to provide greater support to our trainees, the college has arranged for mentors and protocol reviews in the initial phases of individual trainees' research. As many trainees are new to research, this workshop aims to guide trainees on how they can proceed with their research findings, including on providing discussion on their analytical methods and discussions. Ultimately, we hope that this workshop and the College's new exam segment will create a new wave of research excellence within our primary care.

## LUNCH SYMPOSIUM

### Optimizing T2DM Management in Clinical Practice

Time: 12:30 – 13:30



#### *“New Approach to T2DM Management”*

**Speaker:**

**Prof. MA Ching Wan, Ronald**

*Professor, Department of Medicine & Therapeutics,  
School of Biomedical Sciences,  
The Chinese University of Hong Kong*



#### *“From Theoretical Benefit to Real Life Experience: Use of DPP4-Inhibitor at Primary Care”*

**Speaker:**

**Dr. CHU Wai Sing, Daniel**

*Specialist in Family Medicine;  
Chief of Service, Department of Family Medicine and Primary  
Healthcare,  
Hong Kong East Cluster, Hospital Authority*

This lunch symposium seeks to provide a synthesis of current clinical and scientific evidence to manage T2DM. It will focus on the key challenges in T2DM management & possible ways to optimize patient therapy. Real life experience in Hong Kong will be shared for discussion

# FREE PAPER COMPETITION – SCHEDULE OF ORAL PRESENTATION

PART I: 14:30 – 16:00

PART II: 16:30 – 17:30

TIME	TOPIC	PRESENTATION GROUP
<b>Part I</b>		
14:30 – 14:45	Effectiveness of the Multi-disciplinary Risk Assessment and Management Programme (RAMP) on Patients with Diabetic Mellitus – The First Year Experience	<u>Dr. FUNG Siu Cheung, Colman Dai SKD, Kwok LPR, Tsui LHE, Wan YF, Wong KHC, Wong W, Fong YTD, Lam LKC</u>
14:45 – 15:00	Secondary Prevention of Stroke: Knowledge and Perception of Stroke Risk Factors Among Primary Care HK Chinese Patients with Previous History of Stroke or Transient Ischemic Attack (TIA)	<u>Dr. CHEN Xiao Rui, Catherine Leung TF, Chan SL, Tse LA, Chan KH</u>
15:00 – 15:15	Using Overnight Pulse Oximetry in Screening of Obstructive Sleep Apnea for At Risk Adult Patients in Primary Care Setting	<u>Dr. CHIANG Lap Kin</u> Kam CW, Ng L
15:15 – 15:30	Comparison of the Clinimetrics of Four Cardiovascular Risk Prediction Functions for Chinese Patients with Diabetes Mellitus in the Primary Care Setting	<u>Dr. JIAO Fang Fang</u> Lam LKC, Fung SCC, McGhee SM
15:30 – 15:45	Home-Based Physiotherapy Rehabilitation: Patient and Care-Giver Perspective	<u>Dr. CHAN Fai Lap</u> Hui ST, Lai WK, Li PKT, Hui E
15:45 – 16:00	How Physically Active are Our Adult Patients? Influential Factors	<u>Dr. Vanessa AMARAL</u> Luo TC, Wun YT
<b>16:00 – 16:30</b>	<i>Poster Presentation (1/F Foyer) &amp; Coffee Break (G/F Exhibition Hall)</i>	
<b>Part II</b>		
16:30 – 16:45	Empowering Primary Care Practitioners to Prescribe Exercise	<u>Dr. TAM Kwok Cheong, Barry Kung KH, Ching R</u>
16:45 – 17:00	Where Do Primary Care Patients Go for Mental Health Care in Hong Kong?	<u>Dr. CHIN Weng Yee</u> Chan TYK, Lam LKC, Lam TP, Wong YSS, Fong TYD, Lo YCY, Chiu CFB
17:00 – 17:15	Psychometric Testing of Chinese Version of the Score for Allergic Rhinitis (CSFAR): A Screening Tool for Population-Based Study	<u>Mr. LAM Ching, Simon</u> Ho KMJ, Yeung CY, Lee KLJ
17:15 – 17:30	Collaborative Multidisciplinary Approach to Enhance Quality Care for COPD Patients in Primary Care	<u>Dr. NG Lorna</u> Chiang LK, Fung L, Tang R, Siu C, Lau YC

# FREE PAPER COMPETITION – ABSTRACT OF ORAL PRESENTATION ORAL PRESENTATION 1

## Effectiveness of the Multi-disciplinary Risk Assessment and Management Programme (RAMP) on Patients with Diabetic Mellitus – The First Year Experience

FUNG SCC<sup>1</sup>, DAI SKD<sup>2</sup>, KWOK LPR<sup>2</sup>, TSUI LHE<sup>3</sup>, WAN YF<sup>1</sup>,  
WONG KHC<sup>1</sup>, WONG W<sup>1</sup>, FONG YTD<sup>4</sup>, LAM LKC<sup>1</sup>

<sup>1</sup>Department of Family Medicine and Primary Care, The University of Hong Kong

<sup>2</sup>Primary and Community Services Department, Hospital Authority Head Office, Hong Kong Hospital Authority

<sup>3</sup>Statistics and Workforce Planning, Hospital Authority Head Office, Hong Kong Hospital Authority

<sup>4</sup>School of Nursing, The University of Hong Kong

### INTRODUCTION

This study aimed to reveal the post 12-month effectiveness of the Multi-disciplinary Risk Assessment and Management Programme (RAMP) on diabetic patients.

### METHOD

Evaluation involved eleven clinics from four clusters of the Hospital Authority which had started RAMP before June 2010. A random sampling of 1248 patients enrolled into RAMP for more than one year was compared to age-sex, and disease-severity matched non-RAMP controls on clinical outcomes including HbA1c, blood pressure (BP), and low-density lipoprotein cholesterol (LDL-C), and the estimated 10-year cardiovascular disease (CVD) risk using Framingham risk scores equation to reveal the net benefit of RAMP. Independent t-test and Chi-square tests were used for comparison of continuous data and proportions, respectively.

### RESULTS

Both RAMP and non-RAMP patients showed a reduction in mean HbA1c, blood pressure, and LDL-C; and an increase in proportions of patients achieving target control of HbA1c  $\leq 7\%$ , BP  $\leq 130/80$  mmHg, and LDL-C  $\leq 2.6$  mmol/L. RAMP group did not show a significant net reduction in HbA1c compared to non-RAMP group but did show a significant net reduction of 2.61 (1.49) mmHg in SBP (DBP), and LDL-C of 0.17 mmol/L. RAMP reduce 10-year CVD risk by 4.66%, which significantly overwhelmed the 2.46% in control group by 2.2%.

### DISCUSSION

RAMP helped diabetic patients to improve their control of blood glucose, blood pressure, cholesterol level, and reduce their 10-year CVD risk. Significant extra reduction in 10-year CVD risk without net HbA1c reduction supported that the goal of management of diabetic patients should not limited to HbA1c only.

# FREE PAPER COMPETITION – ABSTRACT OF ORAL PRESENTATION ORAL PRESENTATION 2

## Secondary Prevention of Stroke: Knowledge and Perception of Stroke Risk Factors Among Primary Care HK Chinese Patients with Previous History of Stroke or Transient Ischemic Attack (TIA)

CHEN XRC<sup>1</sup>, LEUNG TF<sup>1</sup>, CHAN SL<sup>1</sup>, TSE LA<sup>2</sup>, CHAN KH<sup>1</sup>

<sup>1</sup>Department of Family Medicine & General Out Patient Clinic, Kowloon Center Cluster

<sup>2</sup>JC School of Public Health and Primary Care, The Chinese University of Hong Kong

### AIMS

To explore the knowledge and perceptions about stroke risk factors among primary care HK Chinese stroke patients and to identify possible associations with patient characteristics and cardiovascular disease (CVD) risk factor control.

### METHOD

A questionnaire-based cross-sectional study carried out at GOPCs of KCC. Chinese stroke patients attending GOPCs of KCC from 01/01/2012 to 31/12/2012 fulfilling the inclusion criteria were recruited. Patients' demographic information, knowledge and perceptions about stroke risk factors and their CVD risk factor profile were collected. Student's t-test or ANOVA was used to compare continuous variables and chi-square test for categorical variables. The effects of demographics and the presence of risk factors on patients' perception of stroke were evaluated by logistic regression analyses.

### RESULTS

Among 1001 stroke patients recruited to this study, hypertension, hyperlipidemia and poor life style factors were identified as stroke risk factors by over 80% of patients, whereas old age, male gender, diabetes, atrial fibrillation and carotid stenosis were less recognized. Patients from poor knowledge group were more to be male, older, less educated, more divorced/widowed, financially poorer and more sedentary in life style. Their average systolic blood pressure was much higher, but their metabolic control and lipid profiles were comparable with those from excellent knowledge group. Patients with better education level, higher family income, positive family history of stroke and concomitant HT had better perceptions about their own CVD risk factors.

### CONCLUSION

There was a lack of awareness of stroke risk factors among Chinese stroke patients managed in the primary care. Given the high recurrence rate of stroke and its profound impact, health promotion on stroke risk factors control is essential to reduce the morbidity and mortality of stroke locally.

# FREE PAPER COMPETITION – ABSTRACT OF ORAL PRESENTATION ORAL PRESENTATION 3

## Using Overnight Pulse Oximetry in Screening of Obstructive Sleep Apnea for At Risk Adult Patients in Primary Care Setting

CHIANG LK, KAM CW, NG L

*Family Medicine and General Outpatient Department, Kwong Wah Hospital*

### INTRODUCTION

Obstructive Sleep Apnea (OSA) is common and associates with serious comorbidities. The gold standard diagnostic test is overnight Polysomnography (PSG), while overnight pulse oximetry is commonly implemented as screening test.

### OBJECTIVES

1. To investigate the prevalence of OSA among at risk patients in the primary care setting.
2. To test the usefulness of using overnight pulse oximetry for OSA screening in primary care setting.

### METHODOLOGY

A case series study involving adult patients at risk for OSA in the primary care setting started from September 2009 to January 2013. Overnight pulse oximetry was done for all patients if who were at risk for OSA while at home polysomnography were offered for selected patients. The prevalence and severity of OSA were established. The correlation and agreement between oximetry and PSG were assessed by correlation coefficient, r-value and Bland Altman plot.

### RESULTS

There are 190 male and 123 female patients, with mean (SD) age 52 (11) and 48 (12) years old respectively. 204 patients (65%) were screened positive to have OSA. The mild, moderate and severe OSA was 54%, 29% and 17% respectively.

PSG were done for 86 patients. PSG derived Apnea Hypopnea Index (AHI) had mean 29.1 events/h and SD 23.3 events/h, while overnight pulse oximetry derived Oxygen Desaturation Index (ODI) had mean 20.4 events/h and SD 18.6 events/h. AHI and ODI had good correlation,  $r = 0.84$  ( $P < 0.001$ ). The mean and 2 SD of the difference between ODI and AHI was 11.1/h and 22.5/h.

### CONCLUSION

There is high prevalence of OSA (65%) among at risk patients in the primary care setting. Overnight pulse oximetry is a useful screening test for obstructive sleep apnea.

# FREE PAPER COMPETITION – ABSTRACT OF ORAL PRESENTATION ORAL PRESENTATION 4

## Comparison of the Clinimetrics of Four Cardiovascular Risk Prediction Functions for Chinese Patients with Diabetes Mellitus in the Primary Care Setting

JIAO FF<sup>1</sup>, LAM LKC<sup>1</sup>, FUNG SCC<sup>1</sup>, MCGHEE SM<sup>2</sup>

<sup>1</sup>Department of Family Medicine and Primary Care, The University of Hong Kong

<sup>2</sup>Department of Community Medicine, The University of Hong Kong

### INTRODUCTION

To assess the feasibility, convergent validity and sensitivity of the Framingham, JADE, PRC, and UKPDS cardiovascular risk prediction functions for Chinese diabetic patients in the primary care setting.

### METHODS

A cross-sectional study was conducted in 1140 diabetic patients. Feasibility was assessed by the percentage of patients with complete data for risk prediction. Correlation and equivalence of the cardiovascular risk predicted by each function were used to measure convergent validity. Effect size differences between clinical risk groups were employed to assess the sensitivity.

### RESULTS

Risk prediction was feasible by the Framingham, UKPDS, PRC risk functions in more than 98% patients. Only 74% patients had complete data for the JADE function. The annual total CHD risk predicted by the JADE function and UKPDS engine showed excellent agreement with no significant difference (3.09% vs 2.96%,  $P=0.13$ ) and a strong correlation ( $r=0.8048$ ,  $P<0.001$ ). The Framingham function predicted lower CHD risk than those by the JADE and UKPDS functions (2.52% vs 2.96% and 3.09% respectively), and the CHD risk predicted by PRC function was the lowest. UKPDS showed the best sensitivity in differentiating between clinical high and medium risk groups. Framingham function was the most sensitive to differentiate the low risk group from other risk groups.

### DISCUSSION

The Framingham and UKPDS risk prediction functions showed good feasibility and sensitivity. The UKPDS and JADE risk function showed good agreement in predicting CHD risk. The Framingham and the PRC risk functions estimated lower CHD risks in Chinese diabetic patients compared to UKPDS and JADE risk functions.

# FREE PAPER COMPETITION – ABSTRACT OF ORAL PRESENTATION ORAL PRESENTATION 5

## Home-Based Physiotherapy Rehabilitation: Patient and Care-Giver Perspective

CHAN FL, HUI ST, LAI WK, LI PKT, HUI E

*Community Outreach Services Team (COST), Prince of Wales Hospital*

### INTRODUCTION

Home-based physiotherapy rehabilitation promotes patient and care-giver engagement in patient's chronic disease management. To achieve better rehabilitation outcomes, it is important to understand from patients' and care-givers' perspectives on their problems at home and evaluate the effectiveness of home-based program.

### METHODOLOGY

Home-based physiotherapy program: (Started from May to December of 2012)

#### 1. Patients' and care-givers' feedback

A pre- and post-questionnaire was designed to collect information on the performance in activity of daily living (ADL); caring burden, emotional change and expectation from the recovery of their diseases.

#### 2. Home-based physiotherapy rehabilitation and functional assessment

Physiotherapy equipment was lent to patient according to their needs. A follow-up visit after one month was arranged to review the progress of patient.

The functional outcome measures included modified functional ambulatory categories, Bergs' Balance Scale, Modified Rivermead Mobility index, six- minutes- walk test, Timed up and go test were collected.

### RESULTS

Thirty- three patients completed the program. The results of questionnaire showed improvements in all subjective domains. All functional outcomes showed statistically significant difference in Wilcoxon Signed Rank test with  $T=0.001$ .

### CONCLUSION

The 'Home-based Physiotherapy Rehabilitation' not only improves physical function performance of patients but also enhances the psychological well- being and ADL performance. This program promotes building up the partnership among health care worker, patient and care-giver in their disease management.

# FREE PAPER COMPETITION – ABSTRACT OF ORAL PRESENTATION ORAL PRESENTATION 6

## How Physically Active are Our Adult Patients? Influential Factors

AMARAL V, LUO TC, WUN YT

*Health Bureau, Macau SAR*

### INTRODUCTION

Physical inactivity is an important risk factor for chronic disease, but exercise is not frequently prescribed by doctors. In this study, we evaluated any association between age, sex, chronic illness, employment status, perceived barriers or family physician's advice and the physical activity levels of adult patients in the largest health centre of Macau.

### METHODS

The General Practice Physical Activity Questionnaire (GPPAQ) was administered to a convenience sample of patients between the ages 18-74 years. Basic demographic data, reason of not doing exercise, and any previous discussion with doctors were enquired.

### RESULTS

A total of 424 patients (38% men) were recruited; the median age was 53. Of these, 12% were active, 17% moderately active, 31% moderately inactive and 40% inactive in physical activity. The main perceived barrier for poor physical activity is "lack of time" accounting for 52%. Discussion with the doctor on physical activity was found in 22% of patients. Advancing age (odds ratio (OR)=0.97, 95% confidence interval (CI): 0.960, 0.988) and presence of chronic illness (OR=0.77, 95% CI: 0.637, 0.935) were statistically significant factors associated with physical activity.

### DISCUSSION

Only a small proportion of patients achieved the recommended level of physical activity. Family doctors need to counsel their patients more on daily physical activity.

# FREE PAPER COMPETITION – ABSTRACT OF ORAL PRESENTATION ORAL PRESENTATION 7

## **Empowering Primary Care Practitioners to Prescribe Exercise**

**TAM KCB, KUNG KH, CHING R**

*Central Health Education Unit, Department of Health*

### **INTRODUCTION**

Primary care provides one of the best settings for promoting health. A capacity building programme was organised to enhance primary care practitioners' competence in prescribing exercise in order that clients could be motivated and supported to engage in regular physical activity, with an ultimate aim of preventing lifestyle related non-communicable diseases.

### **METHOD**

Building on the partnership with the Hong Kong Medical Association, a multidisciplinary committee was formed with involvement of public health, primary care, sports medicine, physiotherapy and physical fitness training personnel to steer the project. Evidence-based recommendations on exercise prescription targeting at healthy subjects and people with chronic health conditions (e.g. obesity, hypertension, diabetes etc.) were developed to form the core curriculum. Experts in the fields were invited as speakers to ensure training quality. Training courses primarily targeting at primary care practitioners were conducted in four locations throughout Hong Kong, each consisting of five 2-hour sessions. A cross-sectional survey utilizing a self-developed questionnaire was conducted after each course to collect participants' level of satisfaction on the structure and logistics of the course as well as to evaluate the perceived effectiveness of the course, as reflected by the scoring of their perceived gain on knowledge, skill, confidence and intention of prescribing exercise.

### **RESULTS**

323 doctors were trained, of which 232 achieved at least 80% attendance. Post-training survey from 90 respondents revealed satisfactory self-rated mean scores in knowledge gain, skill improvement, and increase of confidence and intention of prescribing exercise.

### **DISCUSSION**

This empowerment project offered a good opportunity to enhance doctors' awareness and knowledge on exercise prescription. The training courses were well accepted by primary care doctors and seem to be effective in increasing their confidence and motivation to prescribe exercise to clients. Organisation of further training might be indicated in future to promote a sustainable practice of exercise prescription in the primary care setting.

# FREE PAPER COMPETITION – ABSTRACT OF ORAL PRESENTATION ORAL PRESENTATION 8

## Where Do Primary Care Patients Go for Mental Health Care in Hong Kong?

CHIN WY, CHAN TYK, LAM LKC, LAM TP, WONG YSS,  
FONG TYD, LO YCY, CHIU CFB,

### INTRODUCTION

The objective of this study was to examine the mental health help-seeking behaviors and preferences among primary care patients and to investigate the socio-demographic and health status factors that predict help-seeking from a primary care physician (PCP).

### METHOD

A cross-sectional survey was conducted on waiting room patients in 59 primary care clinics in public and private settings across Hong Kong. The questionnaire contained the Patient Health Questionnaire-9 and items on socio-demography, previous help-seeking behaviors and help-seeking preferences for depression and mental health.

### RESULTS

10,179 patients were surveyed with an 81% response rate. When asked who they would seek help from if they were depressed, patients expressed a preference for friends and family (49.1%) over a psychiatrist (26.1%) or PCP (20.1%). Overall men and older patients were less likely to seek help. In terms of professional help, a psychiatrist is more preferred by males while a psychologist or PCP is more preferred by females. In patients with PHQ-9 scores >9, 7.4% had sought the help of a psychiatrist, 4.1% a psychologist and 9.5% a PCP. Patients most likely to seek help from a PCP were female, older, had co-existing illnesses and had milder symptoms of depression.

### DISCUSSION

Approximately a quarter of primary care patients with screened-positive depression reported to have sought professional help for mental health, with more receiving help from a psychiatrist and/or psychologist than a PCP. This has implications for service planning and delivery.

# FREE PAPER COMPETITION – ABSTRACT OF ORAL PRESENTATION ORAL PRESENTATION 9

## **Psychometric Testing of Chinese Version of the Score for Allergic Rhinitis (CSFAR): A Screening Tool for Population-Based Study**

**LAM CS, HO KMJ, YEUNG CY, LEE KLJ**

*Division of Nursing and Health Studies, The Open University of Hong Kong*

### **INTRODUCTION**

Allergic rhinitis (AR), an IgE-mediated immunological disease, affects up to 40% of worldwide population. Its impact on quality of life, medical cost and the precipitation to asthma draws our attention. In order to unfold the prevalence rate of AR which is significant to the planning of primary care, a screening tool, the Score For Allergic Rhinitis (SFAR), was developed in France with sound reliability and validity. The sensitivity and specificity with a cut-off value of 7 were 74% and 83% respectively for AR diagnosis.

Recently, Brislin's model of translation has been adopted to establish a Chinese version (CSFAR) and the semantic equivalence was satisfactory. However, the psychometric properties of CSFAR have not been tested empirically in Hong Kong. Therefore, this study aimed to assess the content validity, face validity, internal consistency and stability of CSFAR.

### **METHODS**

This study employed a cross-sectional design with repeated measures. Content validity was assessed by 6 experts (including physicians, academicians and nurse specialists) on relevancy. Face validity was examined through checking the understandability by twenty children. A convenience sample of 175 students was invited to participate and half of them were randomly selected for a 3-month retest for examining the internal consistency and test-retest reliability.

### **RESULTS**

The content validity index computed from 6 experts was 0.90. Twenty children correctly interpreted most of the items and a 90% understandability of CSFAR was obtained. The reliability was good as evidenced by the Cronbach's alpha of 0.84 for internal consistency and intraclass correlation coefficient of 0.93 ( $P < 0.001$ ) for a 3-month test retest reliability.

### **DISCUSSION**

Findings reveal the CSFAR as a reliable and valid self-report instrument for screening the presence of AR in Chinese population.

# FREE PAPER COMPETITION – ABSTRACT OF ORAL PRESENTATION ORAL PRESENTATION 10

## Collaborative Multidisciplinary Approach to Enhance Quality Care for COPD Patients in Primary Care

NG L<sup>1</sup>, CHIANG LK<sup>1</sup>, FUNG L<sup>2</sup>, TANG R<sup>2</sup>, SIU C<sup>2</sup>, LAU YC<sup>2</sup>

<sup>1</sup>Family Medicine and General Outpatient Department, Kwong Wah Hospital

<sup>2</sup>Physiotherapy Department, Kwong Wah Hospital

### AIMS

1. To enhance quality care for COPD patients in primary care.
2. To empower self management capability and technique of COPD care.

### METHOD

A prospective study of 192 clinically diagnosed COPD patients with baseline spirometry +/- bronchodilator test from Jan 2011 to Sep 2012 in a primary care clinic of Hong Kong. In addition to pulmonary rehabilitation, patients' exercise adherence was facilitated through practical experience and self-efficacy enhancement.

Pre and post assessment tools included spirometry, 6 Minutes Walking Test (6MWT), COPD Self-Efficacy (CSES-Chi), Self-Efficacy for Managing Shortness Of Breath (SEMSOB) and St. George Respiratory Questionnaire (Hong Kong Chinese Version) (SGRQ HKC).

### RESULTS

124 male and 14 female COPD patients, with mean (SD) age 74.2 (6.53) years old had completed the program and the follow up evaluation at 2 months and 6 months. 24.6% of them were active smokers. The stages of COPD were 21% mild, 42.8% moderate, 29% severe and 7.2% very severe respectively. FEV1 at pre, 2 months and 6 months post assessment were 1.17 +/- 0.44, 1.30 +/- 0.54 and 1.28 +/- 0.52 L/min respectively. 6 MWT at pre, 2 months and 6 months post assessment were 320 +/- 89, 348 +/- 73 and 344 +/- 73 M respectively. SGRQ HKC (Total) at pre, 2 months and 6 months post assessment were 32.8 +/- 19.1, 26.8 +/- 16.8 and 26.2 +/- 18.1 respectively. CSES-Chi at pre, 2 months and 6 months post assessment were 0.667 +/- 0.158, 0.698 +/- 0.145 and 0.732 +/- 0.127 respectively. The pre and post assessment at 2 and 6 months showed statistically significant improvement in all outcome measures using paired t-test. 41.2% (N=14) of active smokers successfully quit smoking at 6 months follow up assessment.

### CONCLUSION

A multidisciplinary pulmonary rehabilitation program incorporating patient empowerment has a beneficial role in improving the exercise capacity, self efficacy and functional aspects of COPD patients in primary care.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 1

## Management of Type 2 Diabetes in Ethnic Minority Groups in Hong Kong: What Do Primary Care Physicians Need to Know?

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### OBJECTIVE

To identify the demographics and to compare the diabetes control of ethnic minority group diabetes patients with Chinese diabetes patients managed in the primary care and to explore possible strategies to improve.

### METHOD

Retrospective case series study. Type 2 diabetes patients including Chinese and ethnic minority groups (including Indian, Nepalese, Pakistani, Pilipino and Indonesian) regularly FU in a local GOPC from 01/03/2012 to 28/2/2013 and had annual assessment done were recruited. Their serum fasting glucose (FBS), creatinine (Cr), estimated glomerular filtration rate (eGFR, calculated by MDRD method), Haemoglobin A1c (HbA1c), lipid profile, urine albumin-creatinine ratio (ACR) and co-morbidities were retrieved from the CMS. Student's t-test and analysis of variance (ANOVA) were used for analysing continuous variables and Chi-square test for categorical data.

### RESULTS

Among 4346 type 2 diabetes patients fulfilling the inclusion criteria, 3966 patients (91.3%) were Chinese in origin and 380 (8.7%) were from the ethnic minority groups. Compared with Chinese diabetes patients, ethnic minority diabetes patients were much younger but more obese and had a lower co-morbidity rate of hypertension, stroke, IHD and CKD (all  $P < 0.05$ ). Their glycaemic control was much worse, average diastolic blood pressure much higher, HDL much lower and triglyceride level much higher than Chinese diabetes patients. Among the ethnic minority groups, the HbA1c and lipid control of Pakistani diabetes patients was particularly poorer.

### CONCLUSION

Compared with Chinese diabetes patients, ethnic minority diabetes patients were much younger but more obese. Deficiencies exist in the comprehensive management of diabetes among ethnic minority groups, particularly the glycaemic control and lipid control. Culturally tailored healthcare interventions are therefore required to promote patient education and clinical effectiveness among this group of patients.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 2**

## **The Management of Chronic Obstructive Pulmonary Disease (COPD) in Primary Care in Macau: Would Spirometry Make a Difference?**

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### **INTRODUCTION**

The Global Initiative for Chronic Obstructive Lung Disease (GOLD) guideline recommends inhaled corticosteroids (ICS) only for the COPD patients of Stages III and IV. Primary care doctors without access to spirometry manage their patients according to clinical features. This research studied the drug treatment of COPD patients in primary care against the GOLD guideline if spirometry was available.

### **METHODS**

We recalled the patients with the diagnosis of COPD made clinically without lung function test between 01/01/2005 and 31/01/2012 for spirometry. Their current drug regimes, smoking status and visits to emergency department (ER) were reviewed.

### **RESULTS**

Spirometry was done on 152 patients, of whom 83 (54.6%) had airflow limitation ( $FEV_1/FVC < 0.7$ ), 12 (7.9%) with Stage I, 34 (22.4%) Stage II, 25 (16.4%) Stage III and 12 (7.9%) Stage IV severity. Of the Stage III patients, 15 (60.0%) were on ICS, 7 (28.0%) were on long acting beta-agonist (LABA), 7 (28.0%) were still smoking, and 7 (28.0%) attended the ER in the previous year. The corresponding frequencies for the Stage IV patients were: 5 (41.7%), 3 (25.0%), 6 (50%) and 5 (41.7%) respectively. Combination of theophylline, ICS and short acting beta-agonist were prescribed to 7 (28%) of Stage III patients and 3 (25%) of the Stage IV patients.

However, LABA was given to 2 (16.7%) patients of Stage I, and 2 (5.9%) of Stage II. ICS was given to 6 (50.0%) patients of Stage I and 23 (35.3%) of Stage II.

### **CONCLUSION**

Without the spirometry, the drug treatment of COPD patients was far from optimal.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 3

## The Clinical Outcome of Referred Conditions (Other Than Diabetic Retinopathy) from the Risk Assessment and Management Program (RAMP) in the Primary Care Setting

TONG Y, LUK W, CHEUNG KC

### INTRODUCTION

The Risk assessment and management program (RAMP) for the diabetes commenced in Kowloon Wester Cluster (KWC) in 2009. As an important partner, Optometrists play an essential role in screening and diagnosing eye complications. The dilated fundus photography is an efficient way to assess the presence and severity of the diabetic retinopathy (DR). Moreover, ocular diseases other than DR such as macula disease, glaucoma, retinal blood vessel disease could also be screened. This study tried to evaluate the clinical outcome of referred conditions other than DR to the ophthalmology department from the primary care setting.

### METHOD

In this study, we reviewed cases which were referred to the ophthalmology department with reasons other than DR in the Ha Kwai Chung GOPC from Nov 2011 to July 2012 (9 months duration). All patients were diabetes attending the RAMP assessment. Record review was made in CMC ophthalmology.

### RESULTS

During the period, there were 3916 RAMP cases done with 376 (9.6%) total referred case to ophthalmology department. Among the 376 referred case, 83 (22.1%) referred for eye diseases other than diabetic retinopathy or ungradable photo.

The number (percentage) according to their referral reasons are:

Increased C/D ratio	50	59%
Normal tension glaucoma suspicious	15	18%
Branch retinal artery/vein occlusion	10	12%
Macula problem	4	5%
Optical Coherent Tomography/Visual field testing	2	2%
External Ocular health (eyelid, pterygium)	3	3%
Blur vision	1	1%

(The total number exceeds 83 because two have multiple signs/symptoms.)

Among the 83 referred cases, 78 records were reviewed

The clinical outcome of the reviewed cases:

No attendance to eye specialist	22	28%
<b>Confirmed</b> the diagnosis and treatment offered	21	27%
<b>Suspicious</b> of the disease and under subsequent follow ups	23	29%
Confirmed absence of the ocular disease	8	10%
The clinical sign faded when patient visiting eye specialist	2	3%
Did not check for the presence of the disease	2	3%

From the result, more than 55% of the referred cases further confirm the diagnosis or being suspicious of those eye diseases. The pickup rate is high considering that 28% of cases were defaulted after referral to eye specialist. Only 10% of the cases were found absence of the disease.

### DISCUSSION

Optometrists are capable of detecting and diagnosing major ocular diseases through fundus photo assesment. Patients attending regular RAMP assessment would benefit from this eye screening I not only in terms of controlling the DR condition but also screening for other major ocular diseases.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 4**

## **Audit for Management of Gout in GPC of CMC**

**YIP WK**

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### **INTRODUCTION**

Gout is commonly encountered in general practice. However, management is variable among doctors. This audit serves to give an overview about the current practice management for gout in CMC GPC and to improve the management with a more evidence based approach.

### **METHODOLOGY**

Data is generated using the Clinical Management System of Hospital Authority to find the patients between 2/2012 - 4/2012 who had attended CMC GPC and were coded with International Classification of Primary Care Code T92 (Gout). A total of 184 patients were found. First 50 patients on the generated list were selected for audit purpose and the management of gout of these patients was reviewed. Four aspects of management of gout were reviewed, namely 1. correct diagnosis 2. drug usage during acute gouty attacks 3. proper prescription of allopurinol 4. monitoring of diet compliance.

### **RESULTS**

The patients' age group ranges from 50 to 89 years old (male to female 2:1 ). There are 90% of cases with proper diagnosis of gout. In 66% of cases correct usage of drug therapy was given during acute gouty attacks (i.e. NSAID as 1<sup>st</sup> line treatment). In 96% of cases allopurinol was prescribed with indication and in 76% of cases low purine diet compliance was monitored during follow up consultations.

### **DISCUSSION**

From the above audit, it seems that there is room for improvement for management of patients with gout especially for drug therapy. Hopefully the management of gout in CMC GPC will be more evidence based after this audit.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 5

## Prevalence of Obesity Among Patients with Gout in a General Out-patient Clinic of Hong Kong

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### INTRODUCTION

Gout is a common form of arthritis encountered in general practice. Obesity has been showed to be a risk factor of gout in Caucasian study but data in the Chinese population was limited. This study aims to determine the prevalence of obesity in gout patients in a public community-based clinic.

### METHODS

This was a cross-sectional study on the prevalence of obesity in gout patients managed in the primary care. Patients attending the General Practice Clinic of Yan Chai Hospital between 16<sup>th</sup> August 2012 and 10<sup>th</sup> October 2012 with the diagnosis of gout were recruited. Baseline demographic data including gender, age, body weight (BW) and height were collected. Body mass index (BMI) was used to detect the presence and severity of obesity. Underweight is defined as BMI <18.5 kg/m<sup>2</sup>, normal weight 18.5-22.9 kg/m<sup>2</sup>, overweight 23-24.9 kg/m<sup>2</sup>, and obesity ≥25 kg/m<sup>2</sup>.

### RESULTS

Totally 88 patients were recruited during the above study period. 67 patients (76.1%) were male and 21 patients (23.9%) were female. The mean age was 67.5+/-11.8 years. The mean BMI was 26.5+/-3.6 kg/m<sup>2</sup>. No patient was underweight. 12 patients (13.6%) had normal weight. 19 patients (21.6%) were overweight. 57 patients (64.8%) were obese. According to a local study in 2007, the percentages of overweight and obesity in Hong Kong Chinese working population were 21.5% and 29.9% respectively.

### DISCUSSION

Patients with gout had high prevalence of obesity. Monitoring of body weight and weight management should be emphasized in the management of patients with gout.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 6

## How Well are We Managing Patients with Chronic Gout?

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*Cheung Sha Wan Jockey Club GOPC*

*Department of Family Medicine and Primary Health Care, Kowloon West Cluster*

### **INTRODUCTION**

In patient with recurrent gouty attacks, allopurinol is used to prevent recurrent gouty attacks by lowering serum urate level. Local guideline [1] suggested the effective dosage of allopurinol is 300 mg/day in patients with normal creatinine clearance. We carried an audit to review on management of recurrent gouty attacks in Cheung Sha Wan Jockey Club GOPC.

### **METHODOLOGY**

Patients who are on allopurinol in Cheung Sha Wan Jockey Club GOPC were reviewed. Patient records over the past year (1/2012-12/2012) were review for history of acute gouty attacks and their paired serum urate level and renal function (and calculated for estimated GFR) in the last one year (1/2012 to 12/2012) were also retrieved.

### **RESULTS**

A total of 72 patients were studied.

40 out of 72 (55.5%) patients had at least 1 acute gouty attack in the last 12 months despite on allopurinol.

Out of the 40 patients with gouty attacks over the last year, only 11 of them (27.5%) were on effective dosage of allopurinol based on estimated GFR level.

46 out of 72 patients have serum urate level  $>0.42$  and 31 out of 46 (67.4%) in this group had gouty attack over the last 12 months.

When using serum urate 0.36 as cutoff, there is a 10% reduction of recurrent gouty attacks compared to using serum urate level of 0.42.

### **DISCUSSION**

A significant proportion of patients were not on effective dosage of allopurinol and this can be further optimized to reduce recurrent gouty attacks. International guideline has suggested that reduction in allopurinol dosage fails to prevent allopurinol hypersensitivity syndrome [2] and so the clinical benefit outweighs the potential small increase in risk of hypersensitivity syndrome with dosage increment.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 7**

## **Health Problems Identified in a Mobile Outreach Health Screening Programme for Community-Dwelling Elderly in Hong Kong**

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### **INTRODUCTION**

To identify patterns of health problems revealed in a nurse-led screening programme for community-dwelling elderly at the PolyU-Henry G. Leong Mobile Integrative Health Centre (MIHC), a nurse-led mobile vehicle providing the service in various locations of Hong Kong.

### **METHODS**

This study was conducted through a retrospective case records review on referrals made by MIHC in 2012. The reasons of referrals made after health screening and the corresponding medical decisions were reviewed.

### **RESULTS**

137 out of the 225 referrals made in 2012 were successfully traced, 36% (36% out of 225 referrals) were on male clients. The mean age (SD) of male and female were 74.0 (7.1) and 74.1 (8.3) respectively (n=225). Following these referrals, the corresponding medical decisions included: prescription of medication or investigation (54%), further referral to specialist medical care (27%), and new diagnosis of medical conditions (5.3%). 80% of the referrals concerned physical problems related to blood pressure, blood glucose, pain, visual capacity, weight loss and infection, where blood pressure problems (24%), physical complaints (23.1%), and pain (13.8%) were more common. 12% of the referrals concerned multiple health problems. Besides, less than 10% of the referrals were due to mood problems.

### **DISCUSSION**

The study identifies a number of major health problems among community-dwelling elderly. The results indicate that a majority of the referrals did require prompt medical interventions, which demonstrate the importance of outreach mobile health screening service for community-dwelling elderly.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 8**

## **The Effect of Constipation Management Programme on Community – Dwelling Elderly Aged 60 or above in Hong Kong with Functional Constipation – A Pilot Study**

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### **INTRODUCTION**

Asian prevalence of functional constipation (FC) is 14%, more common in female elderly. Laxative is conventionally used but not always effective. In this regard, the PolyU-Henry G. Leong Mobile Integrative Health Centre (MIHC) introduced a constipation management programme (CMP) to community-dwelling Chinese elderly via an outreach mobile clinic. Health education on pathogenesis, risk factors and popular laxatives, as well as management modalities including self-administrated abdominal massage, exercise and acupressure massage, were introduced through four 1-hour sessions conducted weekly or biweekly. This study aimed at evaluating the CMP's effectiveness.

### **METHOD**

Nine males and twelve females, aged 60 or above, were recruited. Their constipation level was assessed by the Chinese Constipation Questionnaire (CCQ), with cut-off score of  $\geq 5$  indicating constipation. Baseline and outcome scores were both collected within 1 month, before and after the programme. Follow-up evaluations were conducted one month after CMP.

### **RESULTS**

The mean baseline and outcome CCQ scores (SD) were 7.71 (2.777) and 4.14 (3.825) respectively, with statistically significant difference ( $p = 0.001$ ). Males had lower baseline mean score than females (6.67(2.18) versus 8.50(3.00)) but higher mean outcome score than females ((4.56(4.80) versus 3.83(3.10)). Both genders showed improvement but only the effect on females was statistically significant ( $p = 0.001$ ). Fourteen participants (6 Males, 8 females) reported no FC symptoms in follow-up evaluations.

### **DISCUSSION**

The results suggested that the CMP was effective to improve constipation, particularly for female elderly. It is worth introducing the programme to elderly with constipation. Further study will be conducted to substantiate the findings.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 9**

## **The Prevalence of Diabetic Retinopathy Under Risk and Management Program (RAMP) in Kowloon West Cluster**

**KWOK SK, LUK W, CHUNG ST, TONG Y, YIP HT**

### **INTRODUCTION**

Diabetic retinopathy (DR) is prevalent among diabetic patients worldwide. A systematic DR screening is proven to be important for early detection and prevention from progressing to more severe stages.

### **METHODOLOGY**

All fundus photos were reviewed and graded by optometrists and the results were analyzed. Demographic data were collected from computerized medical record system.

### **RESULTS**

The prevalence of DR were 42.23% in 2010 and 41.35% in 2012. Of which, pre-proliferative DR (pre-PDR) and proliferative DR (PDR) types accounted for 2.41% in 2010 and 1.88% in 2012.

The prevalence of having diabetic maculopathy were 7.95% in 2010 and 5.08% in 2012 accordingly.

The referral rate for indicated cases (e.g. ungradable photo, pre-PDR, PDR and diabetic maculopathy) dropped from year 2010 (19%) to year 2012 (9%).

### **DISCUSSION**

Significant prevalence of diabetic retinopathy was detected in both periods. The prevalence of pre-PDR and PDR and diabetic maculopathy decreased in two years time. It could be due to DR screening which allowed early detection and thus prevent progression of the disease. The referral rate decreased as well because of the improvement of VA taking procedure, more sophisticated photo capturing techniques and some severe cases had been referred and followed up by ophthalmology department.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 10

## **The Effectiveness of Family Medicine Specialist Clinic (Orthopedics) in Enhancing the Gate Keeping Role in Primary Care**

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### **INTRODUCTION**

The Kowloon West Cluster Orthopedic Family Medicine Specialist Clinic (FMSC Ortho) has been set up since 2008. Priority 3 out-patient referrals from Princess Margaret Hospital Orthopedics triaged to this clinic were assessed by Family Physicians. It aims at strengthening the gate keeping role in primary care and help to alleviate the prolonged waiting time for secondary care.

### **METHODS**

All referrals recruited to FMSC (Ortho) from June 2010 to January 2013 were followed up and analyzed. Outcome measurements include the proportion of patient requiring special investigations or minor procedures, the discharge rate and the referral rate to secondary care.

### **RESULTS**

During the study period, **1275 referrals** were seen in FMSC (Ortho).

The top 3 reasons of referral were low back pain of different causes, osteoarthritis of knee and different kinds of repetitive strain injury.

3.4% required special investigations and 2.5% had minor procedure done.

1137 cases i.e. 89% have been closed case after an average of 1.5 visits to FMSC Ortho. 64.6% were discharged back to primary care and only 10.6% need referral to Orthopedics.

### **DISCUSSION**

FMSC Ortho is effective in enhancing the gate keeping role in primary care. With the enhancement of consultation time, access to some special investigations and technical support for some minor procedures, majority of non-urgent orthopedic referrals can be managed effectively by Family Physician in primary care.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 11**

## **Patient's Perception on Obesity in GOPC**

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*Cheung Sha Wan Jockey Club GOPC, Department of Family Medicine and Primary Health Care, Kowloon West Cluster*

### **INTRODUCTION**

Obesity is a major public health concern worldwide. Local data suggests that 28.8% men and 13.7% women are obese. Better understanding on patient's perception on obesity helps designing targeted intervention.

### **METHODOLOGY**

This is a cross-sectional study conducted from December 2012 to January 2013. Asian patients aged 18 years old or above at the general out-patient clinic were randomly recruited. Patient's body mass index (BMI) was measured by People weighing machine (Type: Body Weight Style XB). Patient's demographic and perceptions of obesity were assessed by questionnaires. Obesity is defined as BMI  $\geq 25$ .

### **RESULTS**

Total 451 patients were included. Their age ranged 30-91. BMI ranged 16.2-39. 242 patients (53.7%) were obese.

346 patients (76.7%) never heard of the term "BMI". 62 obese patients (25.6%) did not recognize themselves having obesity. Those who had heard of the term "BMI" demonstrated better insight on their obesity perception than those who had never heard of the term "BMI".

Many patients knew obesity could increase cardiovascular risk (71.4%). Most did not know obesity could increase risk of degenerative joint disease, obstructive sleep apnoea, gout, malignancy, infertility and gall stone.

### **CONCLUSION**

This study supports that obesity is a common disease. It demonstrates that patients' insight on obesity is much better among those who heard of the term "BMI". Concept of BMI should be promoted to improve patients' awareness.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 12**

## **Clinical Application of Ambulatory Blood Pressure Monitoring in Primary Care Clinics**

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### **INTRODUCTION**

With the implementation of Risk Assessment and Management Programme – Hypertension (RAMP-HT), ambulatory blood pressure monitoring (ABPM) was introduced in our General Out-patient Clinics (GOPCs) since October 2011. It provides a more comprehensive blood pressure (BP) profile other than office or home BP to better guide physicians in hypertension management. This study evaluated the ABPM profile of our GOPCs' patients and its effect on hypertension management.

### **METHODS**

This is a retrospective study reviewing medical records of all patients with ABPM performed from 1st October 2011 to 31st December 2012. All data analyses were performed by SPSS version 17.0.

### **RESULTS**

274 patients referred to RAMP-HT Clinic had ABPM performed. The mean age of patients was 63.2 years old. 69.7% and 34.3% patients had average daytime and nighttime BP greater than targets respectively. 9 (3.3%) and 77 (28.1%) patients were confirmed to have white-coat hypertension and hypertension with suboptimal BP control. 188 (68.6%) patients were found to have white-coat component and among these patients, 54.8% (103) had suboptimal BP control. There was a statistical significant drop in mean BP from 160/85mmHg before referral to 149/80mmHg at latest visit ( $p < 0.001$ ).

### **DISCUSSION**

ABPM can be easily performed in primary care. It can assist family physicians better manage hypertensive patients with optimisation of the BP control.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 13**

## **New Onset Palpitation in the Primary Care Setting: Case Series of Holter Monitoring**

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### **INTRODUCTION**

Palpitations are non-specific and represent one of the most common symptoms in general medical settings, reported by as many as 16% of patients. Using Holter in primary care enabled an earlier detection of arrhythmia, including some potential serious arrhythmias and speeded up their management.

### **OBJECTIVES**

1. To examine the outcomes of new onset palpitation for patients in the primary care setting.
2. To investigate the characteristics that was predicting a significant cardiac arrhythmia.

### **METHODOLOGY**

Patients presented with newly onset palpitation for less than 3 months were recruited. Those patients needed urgent referral to medical specialist for further management or had known cause of palpitation were excluded. Biochemical investigation included full blood picture, thyroid function test, resting electrocardiography and Holter monitoring were arranged for all patients. The Holter outcomes were analysed.

### **RESULTS**

27 male and 82 female patients with mean (SD) age of 61.2 (17.5) and 55.5 (13.2) years old respectively had completed Holter monitoring. 38% of them enjoyed good past health, while others had at least one chronic disease, including diabetes, hypertension or cardiovascular disease. 37 cases (34%) had significant Holter findings. The 4 leading significant cardiac arrhythmia were paroxysmal supraventricular tachycardia (19%), frequent ventricular ectopics (19%), ventricular ectopics in bigeminy or trigeminy (19%) and paroxysmal atrial fibrillation (14%) respectively. The male patients, patients with age more than 60 or ischaemic heart disease were more likely to have significant cardiac arrhythmia.

### **CONCLUSION**

One third of new onset palpitation for primary care patients had significant cardiac arrhythmia which needed referral for specialist care.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 14

## Acceptance and Barriers on the Use of Electronic Health (eHealth) or Mobile Health (mHealth) among Hypertensive Patients in Primary Care Setting: Cross Sectional Questionnaire Study

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### AIMS

1. To evaluate the penetration of mobile phone and smart phone among hypertensive patients;
2. To evaluate the acceptance and barriers on the implementation of eHealth, mHealth and mobile phone based telemonitoring of blood pressure among hypertensive patients.

### METHODOLOGY

This is a cross sectional questionnaire study, involving patients with hypertension follow up in Family Medicine and General Outpatient Department (FM&GOPD) of Kwong Wah Hospital. Randomly generated list of hypertensive patients were invited to complete the questionnaire.

### RESULTS

51 male and 43 female patients had completed the questionnaire. Among all, 42% were less than 60 years old, 35% were on full time or part time job, 63% had completed secondary or tertiary education. 76% of them had mobile phones while 23% of them had smart phones. 33%, 12% and 7% of them were using desktop, notebook and tablet computer respectively.

20%, 14% and 14% of them had idea of what was eHealth, mHealth and mobile phone based telemonitoring of blood pressure respectively. If there was available of relevant services, 44%, 45% and 50% of them would like to use eHealth, mHealth and telemonitoring of BP.

Regarding mobile phone based telemonitoring of blood pressure, similar proportion of patients (44% versus 45%) preferred in using mobile applications or interactive voice response system to submit their BP measurements. 49% of them agreed to receive hypertension related message while 47% of them agreed to receive other health related information. 45% of patients expressed 'agree' or 'strongly agree' that telemonitoring of BP would help them to have better control of hypertension.

37.7% of patients were worrying about confidentiality or leakage of personal information while using telemonitoring of BP.

### CONCLUSION

Less than one fifth of hypertensive patients understood what was eHealth, mHealth or telemonitoring of blood pressure. Near half of patients expressed willingness to use eHealth, mHealth or telemonitoring of blood pressure.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 15

## Innovations in Mobilizing Community Resources for Sustainable Hypertension Care in Primary Care Setting

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<sup>2</sup>Hong Kong Primary Care for Chronic Disease Association

### INTRODUCTION

An innovative, patient-centered, multidisciplinary programme mobilizing community resources without overloading existing clinic resources in the provision of sustainable quality hypertension care was implemented in this clinic starting from 2012.

### AIMS

1. Promoting patient awareness, knowledge and self-management of hypertension
2. Enhancing patient on home blood pressure monitoring (HBPM) and teaching on techniques of self blood pressure (BP) measurement.
3. Facilitating self BP monitoring by providing BP equipment to patients.

### METHODOLOGY

A newly formed chronic disease patient support group consisting of professionals, volunteers and patients were utilized. With synergistic team efforts and clinic staff's coordination, the comprehensive program in hypertension care included:

1. Regular sessions of workshop on hypertension care and self BP measurement were facilitated by honorary healthcare educators with competence certificate issued to acknowledge patients meeting requirements.
2. Provision of automated BP measurement device validation service and loan scheme to patients
3. Patient Empowerment Scheme including regular experience sharing session among hypertensive patients, multi-disciplinary holistic health promotion series customized to patients' needs and self-management enhancement.

### RESULTS & CONCLUSION

Till end of year 2012, 1,658 BP measurement device validations were performed by the department. More than 1,000 patients had registered to attend the health talk.

43 patients had participated in BP machine loan scheme. All of them were competent in self BP measurement after workshop and conducted self BP monitoring at home. Using paired t-test, both of home BP and post workshop clinic BP were significantly improved.

More than 90% of patients unanimously agreed that they were empowered in home BP monitoring, attained competence and realized its benefits in self-management of hypertension.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 16**

## **How Does Ambulatory Blood Pressure Monitoring (ABPM) Help in Managing Hypertensive Patients in Primary Care Setting?**

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### **INTRODUCTION**

NICE guideline in 2011 highlighted the roles of ambulatory blood pressure measurement (ABPM) in the diagnosis and management of hypertension (HT). White coat effect is a common phenomenon. Our local clinic study in 2010 found that white coat effect was present in 37% of studied patients. This suggested a potential service gap in our clinical practice since if doctors merely rely on clinic BP measurement, a significant proportion of patients might be misdiagnosed as HT, or were over-treated.

### **METHOD**

A retrospective case review study on all patients with ABPM performed from January to November 2012 in a general out-patient clinic (GOPC) at KWC of Hospital Authority.

### **RESULTS**

Totally 21 patients were recruited, with mean age being 63 years old. ABPM was arranged for 10 patients (48%) with known HT, due to suspected white coat effect as shown by discrepancy between clinical and home BP readings. 8 of them were confirmed to have poor BP control and required anti-HT medication adjustment. For the remaining 11 patients, ABPM was performed to confirm the diagnosis of HT since their clinic BP readings were fluctuating despite relatively normal home BP readings. Among them, 7 (64%) were confirmed to have HT, 4 (36%) were confirmed to be normotensive, and suggestive of whitecoat hypertension.

### **DISCUSSION**

Depending on clinic BP alone might overlook the potential white coat effect, and may result in misdiagnosis or over-treatment for HT. As HT is one of our commonest encounters and the BP levels bear much relevance to the subsequent management, ABPM should be widely advocated for diagnosis and management of HT in the primary care setting.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 17**

## **Enhancement of Wound Care Material and Expertise Reduced Nursing Workload in Sunday Clinic in Primary Care Setting**

**LAM MC, CHIU KL, KWOK FL, LEUNG SY, LAM A**  
*Department of Family Medicine, New Territories East Cluster*

### **INTRODUCTION**

To develop a standardized approach on enhancement wound care material and expertise were developed among the four clinics in Shatin in order to decrease the dressing attendance in Sunday clinic and to enhance all nurses of the district to have adequate knowledge in using advanced wound care material.

### **METHOD**

To achieve these objectives, the standardization of wound care material was implemented at September 2012 among four clinics by:

1. Standardize the stock of wound care material in the four Shatin GOPCs  
Wound care products standardization was based on the suitability, quality and ability to meet GOPC's service needs.
2. Provide training to all frontline nurses by wound care nurse  
Providing the education courses of the application of wound care products and nine quick reference cards of wound care products to each nurse at June and July 2012
3. Dressing attendance at each clinic and on Sunday clinic was retrieved from Sept 2011 to Mar 2012 (before intervention) and Sept 2012 to March 2013 (after intervention) respectively. The difference before and after the intervention was compared.

### **RESULT**

There was 3% reduction (39659 and 39505) in dressing attendance after the implementation of the new protocol and training. There was 16% reduction (2599 and 2190) of GOPC dressing attendances in Sunday clinic.

### **CONCLUSION**

There was no significant change in overall GOPC dressing attendances in the whole district. However, standardizing the types and usage of wound care material and improvement in training can help in reducing nursing workload in Sunday clinic.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 18

## Art-Making in a Family Medicine Clerkship: How Does It Affect Student Empathy?

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### INTRODUCTION

To provide patient-centred holistic care, family doctors in particular must possess interpersonal and empathic skills. Medical schools typically adopt a skills-based approach to such training. A novel arts-based approach may also help medical students develop empathic understanding of patients.

### METHODS

This was a mixed-method quantitative-qualitative study. In the 2011-12 academic year, all 161 third year medical students at the University of Hong Kong were allocated into either an art-making workshop or a problem solving workshop during the Family Medicine clerkship. Students in the art-making workshop wrote a poem, created artwork and completed a reflective essay while students in the conventional workshop problem-solved clinical cases and wrote an essay about the principles of family medicine. The Jefferson Scale of Empathy (JSE) (student version) measured the level of empathy of students at the start and end of the clerkship. Within subjects ANOVA was used to compare the change within and between groups. Qualitative data were thematically analysed using a grounded theory approach.

### RESULTS

The quantitative results showed a decrease in JSE scores over time within groups but no statistically significant difference between groups. Qualitative analysis of creative work produced by students in the art-making group revealed understanding gained in relation to self, patients, pain and suffering, and the role of the doctor.

### DISCUSSION

Consistent with the literature, empathy declined over time in medical school. However, the arts-based approach enabled medical students to reflect on the caring aspect of medicine which contributes to empathic understanding. It also seemed to promote self-awareness, which can help them to recognize the potential for emotions to influence judgment which is of vital importance in clinical practice.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 19**

## **Engaging Family Doctors to Participate in Curriculum Development of Undergraduate Community-Based Learning**

**CHIN WY, CHEN J, WONG D, CHAU V**

### **INTRODUCTION**

The MBBS program at the University of Hong Kong (HKU) has been undergoing a curriculum review. One objective is to enhance community-based learning. Family doctors are the community's frontline healthcare providers, and many take students for attachments. They are well-placed to advice on curriculum. This study aimed to seek the views of family doctors regarding curriculum design and outcomes for undergraduate learning.

### **METHODS**

This was a mixed-method semi-qualitative study. A questionnaire was posted to all doctors involved in Family Medicine teaching at HKU regarding curriculum content, structure, and barriers to teaching. Responses were analysed descriptively. Highly-rated teachers were interviewed to identify desired student outcomes and explore how to implement new teaching programs. Content analysis was used to identify themes.

### **RESULTS**

73 questionnaires were returned (response rate 55.3%). Over 80% of the respondents preferred teaching pre-clinical or junior clinical students and focus on communication and interpersonal skills, common conditions and professional skills and attitudes. 68% preferred a longitudinal relationship with the same student. Lack of time and difficulty integrating teaching and service were the main barriers to teaching. 12 interviews were conducted. Emergent themes related to program design, scheduling and faculty support to facilitate teaching. A broad range of student outcomes were identified.

### **DISCUSSION**

Experiential learning opportunities are necessary for medical students and there are many desired outcomes for learning in the community. Clinical teaching is a challenging but rewarding task for family doctors. A longitudinal mentorship program may be one approach which can benefit both our students and teachers.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 20

## Prevalence of Allergic Rhinitis among 16-25 Year Old People Living in Hong Kong

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### INTRODUCTION

Allergic rhinitis (AR), an immunological disease on nasal mucosa, hampers one's quality of life with disturbing symptoms of nasal congestion, sneezing and itchiness. It also associates with asthma and chronic obstructive pulmonary disease. Albeit its increasing prevalence rates worldwide, local population-based study is scarce. The current study aims to fill this gap, from which findings would be vital for future planning of primary care.

### METHODS

A population-based survey with quota sampling of 18 districts was used to enhance the representativeness of sample. According to the Cochran formula, the sample size is 2,305 ( $N = \frac{Z^2 pq}{d^2}$ ; d=2%; p=40%; Z=1.96). The Chinese version of Score for Allergic Rhinitis (CSFAR), a brief and locally validated instrument to screen for AR symptoms, was used. The score ranges from 0 was regarded as suffering from AR). Data was collected in early 2013 at public areas among the 18 districts.

### RESULTS

2,399 participants completed the survey. The mean age was 19.66 and 55% was females. The prevalence of AR was 47.6%. More than 60% of participants performed their major outdoor activities in urban areas. A downtrend in prevalence was found in 16 to 24 year-old and rebound was observed at 25-year-old (45.8%).

### DISCUSSION

Up to our knowledge, this is the first population-based study investigating the prevalence of AR among people of 16 to 25-year-old. Our results showed that AR was prevalent in Hong Kong, even higher than existing epidemiological data (12.7% - 38.5%). Such findings pose implications for health care professionals in shaping future primary care.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 21

## The Use of HbA1c Improved Diagnosis of Diabetes Mellitus among At-Risk Individuals in the Community Setting in Hong Kong

YU YTE<sup>1</sup>, WONG KHC<sup>1</sup>, TAM JH<sup>2</sup>, TSUI HY<sup>2</sup>, LUK W<sup>2</sup>,  
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### INTRODUCTION

HbA1c was adopted as a diagnostic criterion for the detection of diabetes mellitus (DM) by the American Diabetic Association (ADA) in 2010 and the World Health Organization (WHO) in 2011. This study aims to evaluate the change in prevalence of newly diagnosed DM when HbA1c is used together with plasma glucose tests for diagnosing DM among at-risk patients in a general-out-patient-clinic (GOPC) in Hong Kong.

### METHOD

A retrospective cohort study on anonymous patients was conducted at Cheung Sha Wan Jockey Club GOPC from January 2009 to July 2011. 106 patients who had available paired results of HbA1c and fasting plasma glucose between January to December 2009 and without known diagnosis of DM before the test period were identified by the Clinical Data Analysis and Reporting System (CDARS) and included in the data analysis. The prevalence of newly diagnosed DM was determined by both HbA1c and conventional plasma glucose criteria based on available laboratory results up to July 2011.

### RESULTS

44 patients (41.5%) were newly diagnosed to have DM during the study period. Plasma glucose criteria identified 23 of the new diabetic patients (52.3%) whereas HbA1c identified a total of 34 patients (77.3%); 21 patients (47.7%) would not have been diagnosed to have DM if only plasma glucose tests were used; the prevalence of DM among this group of patients increased from 21.7% to 41.5% when both criteria were used instead of plasma glucose tests only. Based on the paired HbA1c-fasting glucose results in 2009, HbA1c identified 8 out of the 9 new diabetic cases confirmed by fasting glucose tests, giving a sensitivity of 89%. The negative predictive value of HbA1c was 99% (85/86) when compared against fasting glucose tests as the diagnostic standard.

### DISCUSSION

Despite limitations in methodology and sample size, our results demonstrated how the use of HbA1c as a diagnostic criterion for DM in addition to conventional plasma glucose criteria significantly improved the detection of DM among at-risk patients in the clinical setting in Hong Kong with good sensitivity and negative predictive value. Larger scale prospective study is warranted to further delineate the actual impact of its use.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 22

## Pilot Study of the Effect of Exercises and Educational Class for Patient with Arthritic Knee in Out-Patient Setting

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### INTRODUCTION

As the aging population in Hong Kong increases, degenerative diseases caused serious impact on public health care system. Osteoarthritis of knee (OA knee) is a very common degenerative disorder causing larger number of patients to suffer. To reduce the demand of medical resources, a knee education and exercises class is implemented in Kwong Wah Hospital out-patient department.

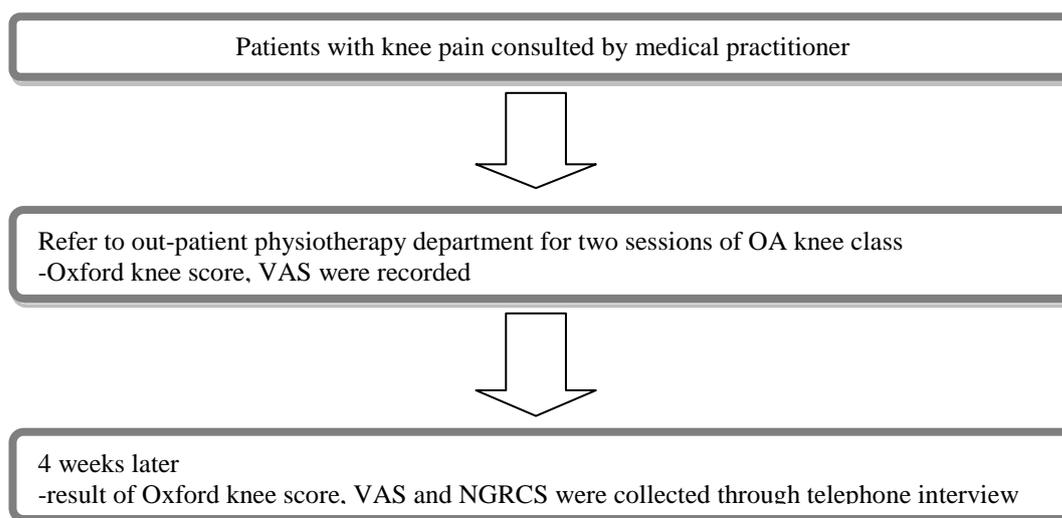
### METHOD

Of eight patients with knees pain with referral specify for knee class, 5 from General Out-patient Clinic (GOPC) were arranged to attend a two-session educational and exercises class. (Appendix 1)

In the first session, patients were assessed by physiotherapist for their general health and knees condition. Functional level and pain level were measured by the Oxford Knee Score and Visual Analogue Scale (VAS) respectively. Then a series of general knee anatomy, OA knee symptoms, pathology were introduced. Knee caring advices and knee caring pamphlets were given to patients.

In the second session, numerous knees mobilization; general strengthening and stretching exercises were taught.

After 4 weeks, the results of Oxford Knee Score and Visual Analogue Scale (VAS) and the numeric global rating change scale (NGRCS) were collected through telephone interview.



## RESULTS

**Table 1**

Mean and standard of NGRCS

	Mean	Std. Deviation
NGRCS	3.8750	2.85044

**Table 2**

Result of pre- and pro- vas score and knee score

	Mean	Std. Deviation
pre class vas	4.0000	1.51186
pro class vas	3.0000	2.13809
pre class knee score	23.8750	6.24357
pro class knee score	26.0000	7.17137

**Table 3**

	Mean	Std. Deviation	Sig. (2-tailed)
pre class vas - pro class vas	1.00000	1.19523	.050
pre class knee score - pro class knee score	-2.12500	3.79614	.157

From table 1, the mean of the NGRCS was 3.88 (SD=2.85) which showed that there was general improvement of the patient condition after OA knee class.

Both VAS and knee score had improvement. But only the VAS had significant statistical change. The mean VAS of the group changed from 4.00 (SD=1.51) to 3.00 (SD= 2.13). The pain reduction was statistical significant before and after the OA knee class. (P=0.05).

Although the mean Oxford Knee score changed from 23.9 (SD= 6.24) to 26.0 (SD=7.17), the difference was not statistical significant (P= 0.16).

## DISCUSSION

Pain associated with arthritic knee is a very common problem in Hong Kong. However, most of the patients do not have enough knowledge on knee care to prevent further deterioration of the knee. Eventually, they may need to receive total knee replacement because of severe deformity and degeneration of knee joints. Via this knee class, patients with OA knee can get an early physiotherapy consultation to enhance their knowledge on self-care and management of pain. The class, moreover, provides psychological support for them. Besides, based on the precise screening from GOPC, suitable patients can be chosen to attend the OA knee class for their primary care. This may reduce the number of referral for relative specific out-patient clinic.

Results of this study show that the class have beneficial effect on decreasing pain and improve knee function in the group of patient with OA knee. In order to yield a more convincing conclusion, a randomized control trial is required. A longitudinal study with longer period of time is also suggested to investigate if the program can reduced the number of referral for specific out-patient clinic.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 23

## Evaluation of the Outcomes of a Multidisciplinary Care Model for Cardiovascular Risk Modification and Patient Empowerment

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### INTRODUCTION

Hypertension is prevalent in Hong Kong and poses formidable challenges to the health care system. A multidisciplinary care program for cardiovascular risk modification and patient empowerment as one of the services under Risk Assessment and Management Programme - Hypertension (RAMP-HT) was piloted in two General Outpatient Clinic (GOPC) since December 2011.

### METHOD

Hypertension patients were referred by GOPC doctors to RAMP-HT for risk assessment by nurses and management of resistant hypertension by Family Medicine specialists. Patients with BMI  $\geq 25$ kg/m<sup>2</sup> were triaged by nurses to join the joint Dietitian and Physiotherapy program. Lifestyle-redesign education, nutritional therapy and exercise prescription were provided to clients for cardiovascular risk modification as part of hypertension management. Selected patients were recruited into a 6-week tailored made empowerment and intervention program. Outcomes evaluation was conducted 6 months post intervention.

Health related outcomes, self-efficacy on exercises, self-perceived physical activity level, dietary behavioral change and patient satisfaction were assessed. Results were analyzed using paired t-test.

### RESULTS & DISCUSSION

From 1st December 2011 to 31st July 2012, 133 patients attended the lifestyle-redesign education. 90 patients were recruited into empowerment program, 58 patients completed 6-month follow-up. Systolic blood pressure (144 to 137mmHg), diastolic blood pressure (84 to 79mmHg), body weight (72.7 to 70.1kg), Body Mass Index (30 to 29kg/m<sup>2</sup>) and waist circumference (95.6 to 91.3cm) have shown significant improvement ( $p < 0.05$ ). There were also significant improvement ( $p < 0.05$ ) in dietary behavioral outcomes, self-rated physical activity level and exercise efficacy. All the candidates were satisfied or very satisfied with the program.

### CONCLUSION

The coordinated, multidisciplinary patient care program was shown to have contributed to risk modification, lifestyle re-modification, dietary control and exercise empowerment in RAMP-HT.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 24

## Innovation for Health Education to Community on Preventing Hypertension: Private & Public Partnership

WAH SL<sup>1</sup>, YUEN HW<sup>1</sup>, WONG SL<sup>1</sup>, TAM YM<sup>1</sup>, CHEUK WH<sup>1</sup>,  
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<sup>3</sup>Nursing Department, Hong Kong Baptist Hospital

### INTRODUCTION

Hong Kong Baptist Hospital (HKBH) in partnership with the Hong Kong Medical Association (HKMA) and Queen Elizabeth Hospital jointly organized innovative health education programs to prevent hypertension since 2010.

### METHOD

1. Talks on (DASH diet) “Diet Approaches to Stop Hypertension” were conducted at elderly centre with cooking demonstration.
2. Nurses modified over 10 DASH diet recipes (Chinese version) through pamphlets and uploaded with demonstration to Facebook together with a DASH diet song.
3. HKBH DASH diet nurse practitioners and HKMA doctor shared DASH diet experience with chefs of Hong Kong Jockey Club (HKJC). The latter designed DASH diet menus which were assessed by dietitian and served in the HKJC restaurants.
4. Annual health program since 2010, “Bringing Better Health to Our Community” over 250 adults attended health talks, health screenings and consultations in 2012.
5. “DASH fun DASH Learning Program” in Schools was organized. Our team visited five schools in Yau Tsim Mong district to teach DASH diet, food label reading and quality life style.

### RESULT

A total of 1517 students attended DASH program and surveys were conducted. For DASH diet knowledge assessment, 1421(93.3%) students showed understanding, 1340 (88.3%) students would take DASH diet and 1180 (77.8%) students would share DASH diet knowledge to family and friends. About 50 (92%) teachers found the program had increased children’s health awareness.

### CONCLUSION

DASH diet education on healthy eating habits diffused to elderly centre, restaurants, schools and community. Promoting public health awareness may prevent hypertension, cardiovascular and kidney disease in the public.

# **FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 25**

## **Identifying Factors Affecting How Patients Choose Public or Private Doctor for Consultation and How They Perceive the Consultation Quality**

**FUNG SCC, WAN YF, WONG KHC, WONG CWW, LAM LKC,**  
*Department of Family Medicine and Primary Care, The University of Hong Kong*

### **INTRODUCTION**

This study aimed to identify patients' socio-demographic and clinical characteristics relating to their use of public and private doctor consultation and perceived consultation quality in Hong Kong.

### **METHOD**

Data from 4,740 participants of the Thematic Household Survey 2009, who aged 15 or above and had consulted Western doctors for their last consultation within the past 30 days, was analyzed. Multiple logistic regression was initially used to identify the difference in socio-demographic and clinical characteristics between these two groups of patients, followed by multiple linear regression to evaluate the independent factors affecting the patient-perceived consultation quality.

### **RESULTS**

About 60.9% (2885) and 39.1% (1855) patients consulted private and public doctor for their last consultation respectively, and they showed significant difference on many aspects of the socio-demographic background, lifestyle habit, self-evaluation of health, and presence of any chronic disease. Patients who were male, less educated, not working, with less household income, with chronic disease, and need follow-up of chronic condition were more likely to consult public doctors. Older patients, non-smokers, and those consulted private doctors were prone to have a better perceived quality with their last consultation.

### **DISCUSSION**

While patients perceived the care offered by private doctors was of better quality, bearing of chronic disease, the subsequent need of regular follow-up, and the associated financial burden make these patients select public healthcare service. Therefore, financial considerations and assistance, including incentives or subsidies, play an important role in the development of the public-private partnership model of share care for patients with chronic diseases.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 26

## Cognitive Profile and Recommended OT Services for Cases with Mild Cognitive Impairment in EPPS of KWC GOPC: A Pilot Study

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<sup>2</sup>Occupational Therapist, East Kowloon GOPC

### INTRODUCTION

Early detection and intervention for mild cognitive impairment (MCI) cases are of growing emphasis. Occupational therapy in newly commenced Enhanced Public and Primary Care Services (EPPS) is one of the best gatekeepers to screen out and triage cases with MCI. This study aimed to explore the profile of referred cases and for better planning of MCI services in primary care setting.

### METHOD

A retrospective study was conducted to all referred cases after commencement of EPPS in East Kowloon GOPC (Feb 2012- Apr 2013) and West Kowloon GOPC (Jan-Apr 2013).

### RESULTS

230 cases were reviewed. The mean age was 79 and 67% of them were female. The mean Mini-Mental Score Examination was 19.2 (ranged from 5-30) with 41 % had the scores above the cut-off score. Furthermore, detailed demographic data was analyzed for 41 cases in Jan- Apr 2013. 30% of them lived alone or were daytime alone while 19% were home-bounded. 22% of them experienced falls and 3% with sudden onset of memory decline recommended further investigation of any organic cause or depression.

### DISCUSSION

With those characteristics of referred cases, Occupational therapists could better plan and design appropriate intervention and services model. Recommended programs are not only cognitive and memory training but also fall prevention, brain gymnasium, carer-giver empowerment and home program.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 27

## Paradiagram Shift from Hospital to Primary Care Services: Occupational Therapy Services Provided in EPPS

TONG YC<sup>1</sup>, CHAN SF<sup>2</sup>

<sup>1</sup>Occupational Therapist, West Kowloon GOPC

<sup>2</sup>Occupational Therapist, East Kowloon GOPC

### INTRODUCTION

With ageing population and increasing demand of health care system, there is growing emphasis for primary care services. Occupational therapy (OT), in line with the trend, has been providing services not only in hospitals but also in primary care setting. This review was to explore the service distribution in the newly commenced OT services in Enhanced Public and Primary Care Services (EPPS).

### METHOD

The referral pattern, waiting time, ratio of service types and sessions of various occupational therapy services in the East Kowloon GOPC (Feb 2012- Apr 2013) and West Kowloon GOPC (Jan-Apr 2013) were reviewed.

### RESULTS

OT services covered a wide spectrum of services from splintage and pressure garment to cognitive and lifestyle redesign services. Among the 4617 attendances, the average waiting time for new referral was within two weeks (ranged 1 to 5 weeks). 72% of them were individual consultations with three sessions for each case on average. The reminding (28%) were group programs or public talks. The top referrals for individual OT services were all chronic diseases namely musculoskeletal cases (45.5%), cognitive cases (23.5%) and varicose veins (9%).

### DISCUSSION

Occupational therapy is in line with the 5 principles of Family Medicine in KWC: Convenient, Coordinate, Comprehensive, Continuous, Family and Preventive, and to provide early screening and intervention, preventive measures for chronic diseases and empowerment of carers and patients.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 28

## Review of Use of Statin in Hypertensive Patients in CMC GOPC

CHO YFA

### INTRODUCTION

Statin was shown to be beneficial to patients with high cardiovascular risk. This study reviews the prevalence of statin use in hypertensive patients in GOPD and usefulness of CMS reminder system in disease management.

### METHODS

393 patients with chronic follow-up for hypertension in Caritas Medical Centre general outpatient clinic were studied from 10/2012 to 2/2013. Patients with established cardiovascular disease or equivalent (DM) were excluded. The 10-year cardiovascular risk was estimated by the JBS Coronary Risk Prediction Chart. Reminders were set for patients who should but not yet consider starting statin. The records were reviewed from 2-4/2013 after 1-2 sessions of consultation.

### RESULTS

24 (6.1%) patients had 10-year cardiovascular risk lower than 10%. 211(53.7%) patients had 10-year cardiovascular risk 10-20%. 158(40.2%) patients had cardiovascular risk > 20% while 57 were already on statin appropriately at the first round of record review. 101 reminders were set in CMS to alert for considering statin in follow-up.

37 (36.6%) patients were put on statin after reminders were set. 16 patients refused statin as recorded in the consultation notes. 48 patients were not recorded for any reason for not starting statin.

### DISCUSSIONS

According to the department protocols and international guidelines, patient with 10-year cardiovascular risk >20% should be considered for statin after lifestyle control. Family physicians should be alert to estimate the cardiovascular risk of patient. The use of reminder system can reinforce explanation and prescription.

# FREE PAPER COMPETITION – ABSTRACTS OF POSTER PRESENTATION POSTER PRESENTATION 29

## Hypertension Self-Management Programme to Enhance Blood Pressure (BP) Control for Patients with Suboptimal BP Control in Primary Care Setting: Kwong Wah Hospital Experience

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<sup>2</sup>Hong Kong Primary Care for Chronic Disease Association

### INTRODUCTION

Hypertension (HT) and its related cardiovascular complications are the major cause of mortality and morbidity worldwide. Self-monitoring of blood pressure (SMBP) can lead to better blood pressure control, better adherence to treatment, and patients become more actively involved in the management of their own BP problem.

### OBJECTIVES

1. Formulating strategic protocol to manage those patients with suboptimal BP control;
2. Promoting and hand on teaching on self-blood pressure monitoring;
3. Enhancing self BP monitoring by providing BP machine checking and BP machine loan scheme.

### METHODS

All hypertensive patients with suboptimal BP control, as defined as BP > 140/90 for age less than 80 or BP > 150/90 for age 80 or above were identified. Strategic protocol of Hypertension Self-Management Programme was formulated by HT working group, which focused on motivating all patients to practice self BP monitoring. Programme activities included self BP measurement mini-workshop, patient BP machine checking and correlation test, BP machine loan scheme and multidisciplinary health talk series. Patients from this population were sampled randomly in monthly interval to assess the progress of blood pressure control.

### RESULTS

29.8% (1,480/4,964) of hypertensive patients under 80 and 14.9% (198/1,332) of those aged 80 or above were identified as with suboptimal BP control. The percentage of patients with suboptimal BP control decreased to 67%, 38% and 31% at 1, 3 and 6 months after implementation of Hypertension Self-Management Programme.

### CONCLUSION

Hypertension Self-Management Programme focusing on empowerment on self-BP monitoring had produce significant beneficial effect in BP control.

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