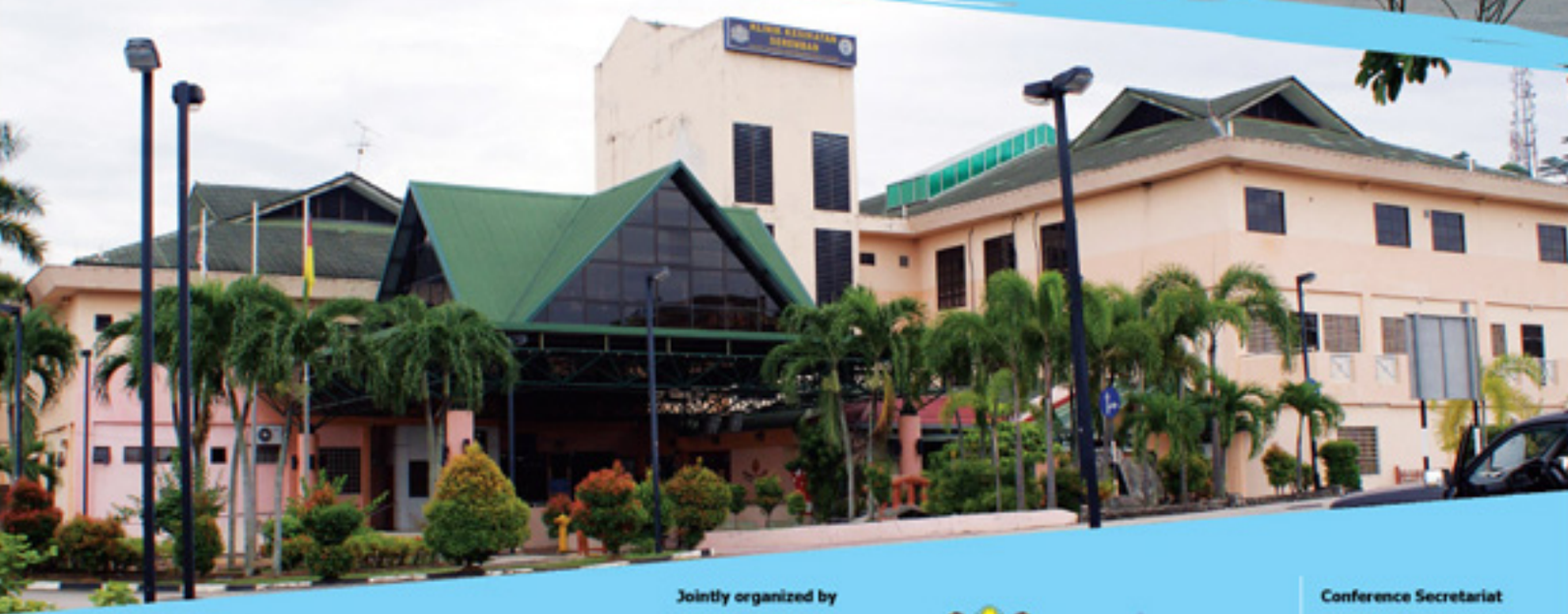
15th MALAYSIAN FAMILY MEDICINE SCIENTIFIC CONFERENCE

PRIMARY CARE PHYSICIAN AS EFFECTIVE GATEKEEPER.

23-26 JUNE 2011
ROYALE BINTANG HOTEL
SEREMBAN
NEGERI SEMBILAN



Jointly organized by

Family Medicine Specialist Association

Ministry of Health Malaysia
Negeri Sembilan State Health Department

International Medical University

Conference Secretariat

RANBAXY

Contents

MESSAGE FROM THE MENTERI BESAR OF NEGERI SEMBILAN

I wish to offer my congratulations to the Family Medicine Specialists Association, Malaysia on the occasion of your 15th Malaysian Family Medicine Scientific Meeting 2011 and the publication of your scientific program book.

The challenges of healthcare in Malaysia are greater day by day. The state government of Negeri Sembilan has been always supportive to all health programs and activities conducted in this state. Tremendous achievement has been made during our 51 years of independence in both the primary health care as well as secondary and tertiary care.

By 2020, the city of Seremban is expected to have a population of more than 1 million. We are planning for another two public district hospitals in Nilai and Rembau, 10 Health clinics and up-grading of 6 Community health clinics in Negeri Sembilan for the rakyat.

We challenge the health care profession to be in step with the infrastructure development in providing the next level of medical services, the human resource development and professional development so that we can achieve our vision 2020.

We look towards the Malaysian Family Medicine Specialists Association as a credible and reliable partner in health.

Best wishes for the 15th Malaysian Family Medicine Scientific Meeting and may you all have a successful year ahead.

Y.A.B. DATO' SERI UTAMA HJ. MOHAMAD BIN HJ. HASAN
MENTERI BESAR OF NEGERI SEMBILAN

MESSAGE FROM THE DEPUTY MINISTER OF HEALTH, MALAYSIA

I would like to take this opportunity to congratulate the collaborative efforts of the Malaysian Family Medicine Specialists Association, Negeri Sembilan State Health Department and the International Medical University, Malaysia (IMU) for organizing a conference that will address the need for professional development of primary care providers in Malaysia. I am pleased to note that Negeri Sembilan has previously successfully hosted this outstanding event.

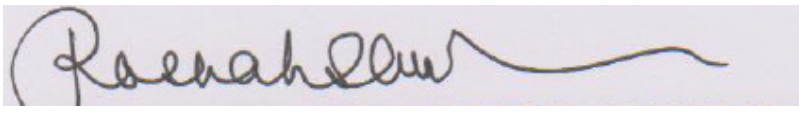
Modern healthcare system aims to deliver to patients, a comprehensive and holistic care and lead to better health for the community at large. High quality primary care is an essential element that is critical for the realization of this aim. In the public healthcare system in Malaysia, there is high expectation that primary care physicians will function as effective gatekeepers. I am happy to note that this conference address this important and challenging task of the primary care physicians.

With the ease of access of medical information and increased patient expectation, patients may be expected to demand for care by a specialist when their problems can be adequately managed in primary care. Primary care service in the Ministry of Health needs to ensure good quality promotive, preventive, curative and rehabilitative care that match patient's expectation and at the same time, allow patients who really need specialists' attention at the secondary and tertiary care I am sure this conference will address the information needs of primary care providers, thus ensuring that they will maintain their competence as effective gatekeeper.

I congratulate the organizing committee for putting in a great effort to bring together foreign and local experts to share ideas on how primary care provider can be as effective gatekeeper.

I wish all participants a fruitful and memorable conference.

Yours sincerely,



DATUK ROSNAH BINTI HAJI ABDUL RASHID SHIRLIN

DEPUTY MINISTER OF HEALTH MALAYSIA

MESSAGE FROM THE DIRECTOR GENERAL OF HEALTH, MALAYSIA

Congratulations to the organizers for their tireless efforts in promoting continuing medical education at the national level. This will be the 15th of a series of national-level scientific meetings and conferences organized by the Malaysian Family Medicine Specialists Association.

In healthcare systems where primary care have an integral role, impressive health gains are achievable with relatively lower healthcare expenditure. Doubtless, much of the gain is due to investment in preventive care. Malaysia is one of the success stories in the international scene. However, with the introduction of a wide array of healthcare technologies and therapies, coupled with increasing patient expectation, hospitals and primary care clinics will continue to strain the healthcare budgets. It is now even more important to strengthen the gatekeeping role of primary care physicians to ensure equitable and good quality healthcare for all Malaysians.

It is estimated that 90% of an individual's medical needs can be met by a primary care physician. The primary care physician serving as a 'gatekeeper' can make judicious decisions about the appropriate use of medical services, thereby contributing to costs containment while improving the quality of care. It is important that primary care physicians should develop a positive attitude and play effective gate keeper's role in order to improve the health status of individuals, families and communities.

What constitute a good gatekeeper? This question will be deliberated in this conference and hopefully many recommendations can be identified and put forward for possible implementation. Areas that this conference will discuss include ways to sustain the critical mass of well trained primary care physicians, approaches to broaden and enhance the skills of primary care teams, development of referral criteria and care pathways, among others.

I hope this conference will see active participation of all delegates and be a platform to gain knowledge and discuss issues related to gate keeping.

I wish you all will have a successful conference

DATO' DR HASAN BIN ABD RAHMAN

DIRECTOR GENERAL OF HEALTH, MALAYSIA

MESSAGE FROM THE PRESIDENT OF FAMILY MEDICINE SPECIALIST ASSOCIATION OF MALAYSIA

A warm welcome to all participants to this 15th Family Medicine Scientific Conference held at Royale Bintang Hotel Seremban from 23 – 26th June 2011. I heartily congratulate the organizing committee, our invited speakers and participants involved in the 15th Malaysian Family Medicine Scientific Conference 2011 for carrying out this important education programme. A word of appreciation also goes to Chief Minister of Negeri Sembilan, International Medical University and Negeri Sembilan State Health Department.

This year's conference theme on 'Primary care physician as effective gate keeper' is aptly chosen in view of the coming national health care reform in this country. The roles of primary care physician in Malaysia must continue to evolve. The tasks of a primary care physician who serves as a 'gatekeeper' should be to manage and co-ordinate a patient's care, as well as to be the sole referring agent to specialists. On the one hand, the gatekeeper is the patient's 'health adviser'. On the other hand, he has to make judicious decisions about the best and most appropriate use of medical services, and thereby contribute to containing costs while improving the quality of care.

"Primary care physician as effective gate keeper 2011" will incorporate a strong local focus, with some of the country's best speakers to share their insights and invaluable expertise on a broad range of topics, practice case studies covering on the gate keeper role. This conference will provide an excellent platform for the dissemination and discussion on gate keeper function of primary care physicians in this country.

On behalf of the Family Medicine Specialist Association it gives me great pleasure to extend our greetings to everyone participating in this conference. Our appreciation and gratitude must also go to the Deputy Health Minister, Chief Minister, Negeri Sembilan, International Medical University, Negeri Sembilan State Health Department and all sponsors for their valuable support towards paving the way forward for primary care. This conference would not be possible without their support.

DR MASTURA HJ ISMAIL
PRESIDENT OF FAMILY MEDICINE SPECIALIST ASSOCIATION OF MALAYSIA

MESSAGE FROM THE ORGANIZING CHAIRPERSON

Welcome to Negeri Sembilan! After a gap of 10 years, Seremban is playing host again for the FMS conference. In the past 10 years, increasing investments have been channelled into the primary health care system by the Ministry of Health Malaysia; both in the development of infrastructure and training of human resources. This is in tandem with the rising prevalence of chronic diseases in this country and also to meet the demand by patients who want to see a better quality of service available within the close proximity of their community. Family Medicine Specialists and other primary health care providers constantly face the challenge to practice patient-centred clinical care without over-stretching the secondary care services.

It is thus timely for this conference to reflect on the key task of primary care doctors to be effective gatekeepers. Many interesting clinical topics by renowned local and international speakers have been carefully selected to accommodate the need to improve our knowledge and clinical skills at the primary care level. A plenary session on traditional/ complementary medicine has also been included to highlight this mode of alternative treatment which is fast gaining popularity in our population.

This conference is jointly organized by Family Medicine Specialist Association (FMSA) of Malaysia, International Medical University (IMU) and Negeri Sembilan State Health Department. I would like to extend my gratitude to all the speakers, sponsors, Ministry of Health Malaysia and all involved for their invaluable contribution. I look forward to welcoming you to our conference and trust that your time here will be worthwhile and meaningful.

DR MARIAM BINTI ABDUL MANAP
ORGANIZING CHAIRPERSON

ORGANIZING COMMITTEE

Advisor	:	Dato' Dr Hjh Zailan Dato' Hj Adenan
Chairperson	:	Dr Mariam Abdul Manap
Co-Chairperson	:	Dr Mastura Ismail
Secretary	:	Dr Siti Zubaidah Mohd Ali
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Social Events / transportation	:	Dr Siti Rokiah Kamarudin
Protocol/ Souvenirs	:	Dr Shariah Idris
Registration / accommodation	:	Dr Shariah Idris Dr Sabariah Idris

SCIENTIFIC COMMITTEE

Chairperson	:	Dr Norsiah Ali
Co-Chairperson	:	Prof Taufik Teng Cheong Lieng
Committee Members	:	Dr Azainorsuzila Mohd Ahad Dr Iliza Idris A/Prof Kwa Siew Kim A/Prof Noor Zuraini MH Robson Dr Verna Lee Kar Mun Dr Faezah Hassan Dr Irmi Zarina Ismail

PAST PRESIDENT
THE MALAYSIAN FAMILY MEDICINE SPECIALISTS ASSOCIATION

2002-2004 DR MUHD KHAIRI BIN MUHD TAIBI

2004-2006 DR ZAITON BINTI AHMAD

2006-2008 DR NAZRILA HAIRIZAN BINTI NASIR

2008-2010 DR ZIL FALILLAH BT MOHD SAID

OPENING CEREMONY

OF THE 15TH FAMILY MEDICINE SCIENTIFIC CONFERENCE
24TH JUNE 2011
ROYALE BINTANG HOTEL SEREMBAN, NEGERI SEMBILAN

9.00 am	Arrival of invited guests
9.20 am	Arrival of Guest of Honour Datuk Rosnah Rashid Shirlin Deputy Minister of Health, Malaysia
9.30 am	Negaraku
	Doa
	Welcome speech by Dr. Mariam Abdul Manap Organizing Chairperson
	Speech by Dr. Mastura Ismail President FMSA, Malaysia
	Opening speech by Datuk Rosnah Rashid Shirlin, Deputy Minister of Health, Malaysia
	Multimedia Presentation
	Booth Visits
	Photography Session
	Press Conference
10.30 am	Tea

Programme Summary

THURSDAY 23rd June 2011	FRIDAY 24th June 2011		SATURDAY 25th June 2011		SUNDAY 26th June 2011	
			BREAKFAST SYMPOSIUM			
	PLENARY 1 *(Seri Negeri 1)* 1 Care for 1 Malaysia: Why & How?		PLENARY 3 *(Seri Negeri 1)* • Communication		PLENARY 5 *(Seri Negeri 1)* • New Modalities in Traditional/ Complementary Medicine	
	KEYNOTE ADDRESS Primary Care Physician-Gatekeeper Role OPENING CEREMONY		SYMPOSIUM 5 *(Seri Negeri 1)* • Herbal Medicine • ENT	SYMPOSIUM 6 *(Seri Negeri 3)* • Psychiatry • Substance Abuse	TEA BREAK	
PRE CONFERENCE • RHEUMATOLOGY WORKSHOP • EMERGENCY MEDICINE • DM CONVERSATION MAP • PRACTICAL GUIDE TO INSULIN THERAPY • COPD WORKSHOP	TEA BREAK				SYMPOSIUM 9 *(Seri Negeri 1)* • Dermatology • STI/MSA	SYMPOSIUM 10 *(Seri Negeri 3)* • Paediatric
	SYMPOSIUM 1 *(Seri Negeri 1)* • Gate Keeping • What do GP wants?	SYMPOSIUM 2 *(Seri Negeri 3)* • Colorectal Ca • Dyspepsia	FREE PAPER PRESENTATION			
	LUNCH SYMPOSIUM *(Seri Negeri 1)*					
	FRIDAY PRAYER					
	PLENARY 2 *(Seri Negeri 1)* • Common Tropical Diseases • Migraine		PLENARY 4 *(Seri Negeri 1)* • Teen stress: Is it Distress?			
CONFERENCE REGISTRATION (4-6pm)	SYMPOSIUM 3 *(Seri Negeri 1)* • High Risk Pregnancy • Urinary Incontinence • Eye Problems	SYMPOSIUM 4 *(Seri Negeri 3)* • Antibiotic • Hepatitis • TB	SYMPOSIUM 7 *(Seri Negeri 1)* • Osteoarthritis • Chronic Pain	SYMPOSIUM 8 *(Seri Negeri 3)* • Parkinson Ds • Geriatric		
	TEA BREAK					
	DINNER SYMPOSIUM *(Seri Negeri 1)*		FREE & EASY			
	FMSA AGM *(Seri Negeri 3)*		GALA DINNER *(Seri Negeri 1)*			

CONFERENCE DAY 1: FRIDAY (24TH JUNE 2011)

TIME	ACTIVITY	
0800	**PLENARY 1** 1 care for 1 Malaysia: Why & How? *Dr Safurah Jaafar*	
0845	**KEYNOTE ADRESS** Primary Care Physicians: Gate Keeper Role *Dato' Dr Hasan Abdul Rahman*	
0930	**OPENING CEREMONY**	
1030	**Tea break/poster presentation**	
1100	**Symposium 1**	**Symposium 2**
	Lecture 1 The Good, The Bad and The Puzzle of Gate Keeping *Dr Zainal Fitri Zakaria*	**Lecture 1** Colorectal Cancer–Why, Who and How to Screen *Dato' Prof Dr KL Goh*
	Lecture 2 What do General Practitioners want? *Datuk Prof Dr Thuraiappah*	**Lecture 2** Dyspepsia: What Can It Be? *Dato' Prof Dr Kandasamy-Palayan*
1200	**Lunch Symposium 1**	
1300	**Friday prayer**	
1430	**PLENARY 2** Common Tropical Diseases– Global Challenges *Dr Veena Kalra* Update on Migraine *Prof Dato' Dr Raymond Azman Ali*	
1530	**Symposium 3**	**Symposium 4**
	Lecture 1 High Risk Pregnancy- Have We Done Enough *Dr H Krishna*	**Lecture 1** Rational Antibiotic Prescription In Primary Care *Dr Christopher Lee*
	Lecture 2 Female Urinary Incontinence *Dato' Dr Sivalingam Nalliah*	**Lecture 2** What is New in Non- Alcoholic Steato-Hepatitis, Hepatitis B and Chronic Hepatitis C *Dato Prof Dr Kew Siang Tong*
	Lecture 3 Eye Problems: When to Treat and When to Refer *Prof Dr Muhaya Muhamad*	**Lecture 3** Current Update on Pulmonary Tuberculosis Management *Dr Ashari Yunus*
1700	**Tea break**	
1900	**Dinner Symposium 1**	
2000	FMSA Annual General Meeting	

CONFERENCE DAY 2: SATURDAY (25TH JUNE 2011)

TIME	ACTIVITY	
0730	**Breakfast Symposium**	
0830	**Plenary 3** What's Next When Communication Fail? *Dato' Dr Hjh Zailan binti Dato Hj Adenan*	
0930	**Symposium 5**	**Symposium 6**
	Lecture 1 Herbal Medicine - What Works and What Don't *Lee Ching Yan* **Lecture 2** ENT Problems: When to Treat and When to Refer? *Dr Rahmat Omar*	**Lecture 1** Managing Acute Psychosis in Primary Care *Dr Zainab Abd Majeed* **Lecture 2** How to Identify Illicit Drug Users in your clinic ? *Dr Norsiah Ali*
1030	**Tea break/poster presentation**	
1100	**Free paper presentation**	
1200	**Lunch symposium 2**	
1400	**Plenary 4** Teen stress: Is it distress? *Dr Iskandar Firzada Othman*	
1500	**Symposium 7**	**Symposium 8**
	Lecture 1 Osteoarthritis: When is Surgery Indicated? *Mr Bernard Devadason* **Lecture 2** Drugs in Chronic Pain- Which to Choose? *Dr Mary Suma Cardosa*	**Lecture 1** Update on Parkinson Disease *Dr Lim Shen Yang* **Lecture 2** Care of Grey Matter *Dr Yau Weng Keong*
1600	**Tea break**	
1630	**Social Event (free & easy)**	
2000	**GALA DINNER**	

CONFERENCE DAY 3: SUNDAY (26TH JUNE 2011)

TIME	ACTIVITY	
0830	**PLENARY 5** New Modalities in Traditional/Complementary Medicine in Malaysia *Dr Ramli Abd Ghani*	
0930	**Tea break**	
1000	**Symposium 9**	**Symposium 10**
	Lecture 1 Genitourinary Infections: Modified Syndromic Approach (MSA) *A/ Prof Dr Leelavati a/p Muthupalaniappen*	**Lecture 1** Introduction to Integrated Management of Childhood Illness for child survival *Dr Wong Swee Lan*
	Lecture 2 Cosmetic Dermatology: Coming of Age? *Dr Koh Chuan Keng*	**Lecture 2** The Child With Learning Difficulties-Learning the secret *Dr Juriza Ismail*
	Lecture 3 Skin Manifestations of Systemic Diseases-What Must Not Be Missed? *Dr Najeeb Safdar*	**Lecture 3** The Child With Fever and Rash *Dr Kamarul Azhar*

ABSTRACT

PLENARIES AND SYMPOSIUMS

P1

1CARE FOR 1MALAYSIA – WHY AND HOW?

Dr Safurah Jaafar,
Director Family Health Development Division & Senior Consultant Public Health Physician,
Ministry of Health, Malaysia.

The Malaysian health system has often than not, being quoted as having achieved remarkably high and equitable health status at relatively low cost. Although the public sector providers have received increasing acceptance the inherent popular dissatisfaction still lingers and the persistence of an active private sector raise questions about the public health services' responsiveness. Public services continue to provide at very low cost, promising the population better access. On the other hand, the perception that private care is better quality, or the greater convenience of private care, lead a large number of people to pay for services that they could otherwise get for free or at highly subsidized rates. This increasing phenomenon may not only make private services more attractive to healthcare providers but it will lead to unnecessary increase in private spending which will have a cumulative effect on affordability and access at the macro level.

This potential cause to disparity has offered a historic opportunity for the government to look deeply into the current health system and to offer and create a more equitable health care system, a project given the name 1Care for 1Malaysia. Key elements of this health care reform relevant to promoting equity include access related to insurance coverage and costs, strengthening primary care with comprehensive benefit package, improvements in health information technology, changes in physician payment, adoption of a national quality strategy informed by research, and improved disparity monitoring and accountability. With effective implementation, improved alignment of resources with patient needs, and most importantly, revitalization of primary care, these reforms could measurably improve equity.

This presentation will discuss their potential promise, pitfalls, and steps needed to jumpstart progress toward more equitable health care.

KEYNOTE

PRIMARY CARE PHYSICIANS AS EFFECTIVE GATE KEEPER

Dato Dr Hasan bin Abdul Rahman ,
Director of Health,
Ministry of Health Malaysia

The primary care services play an integral role as most of attendances to health services in Malaysia for both government and private health facilities were as outpatient attendances. The health system in Malaysia is facing several challenges such as increasing cost, high patient's expectation, changing disease burden, accessibility in certain locality, limited resources, etc. In healthcare systems where primary care have an integral role, impressive health gains is achievable with relatively lower healthcare expenditure. With the introduction of a wide array of healthcare technologies and therapies, coupled with the increasing patient expectation, the hospitals and, increasingly, the primary care clinics, will continue to strain the healthcare budgets. It is now ever more important to strengthen the gatekeeping role of primary care physicians to ensure equitable and good quality healthcare for all Malaysians.

The main aim for gatekeeping was mainly to reduce the cost of healthcare without affecting the quality. However, issues pertaining providing quality of care and ensuring patients' satisfaction were doubtful. There are some drawbacks of gatekeeping such as it limit patient's freedom, reduce patient's satisfaction and may not be preferred by some specialists in hospital. In Malaysia, even though there is no strict role for gatekeeping yet, the gatekeeping role of primary care physician is still not optimal. Primary care physician face various challenges such as change in disease pattern, increasing disease burden, lifestyle related conditions, human resource, infrastructure, equipment & drugs. Role as effective gatekeeper can still be performed by prioritization, producing local guideline for primary care physician, multitasking, good & effective monitoring and upgrading knowledge & skill in order to provide holistic & comprehensive service to patient & community.

S1L1

THE GOOD, THE BAD AND THE PUZZLE OF GATE KEEPING

Dr Zainal Fitri Zakaria,
Family Medicine Specialist,
Putrajaya Health Clinic.

Gatekeeping is a challenging role for the primary care provider (PCP). Primary care gate keeping aims to reduce patient referrals to specialists and thereby to reduce costs. Gatekeepers ensure equity by judiciously matching healthcare services, including specialty referrals, to healthcare needs. In countries where primary care physicians co-ordinate care and control access to specialists and the utilization of associated services, the cost of health services and their share of the national economy are lower compared with developed countries who offer direct access to medical services. However public acceptance of gatekeeping varies from one country to another. In countries where specialist care is easily accessible, primary care gate keeping is less preferred.

As we are heading towards new health care system (1Care), the role of PCP as a gatekeeper need to be strengthens. Nevertheless there are few prerequisite before we can achieve the goal. A good and attractive provider payment mechanism needs to be implemented so as to encourage PCP to provide management of complex cases and discourage both over referral and under referral to specialists. The knowledge and competency of PCP need to be upgraded through courses and training by the accredited body. Comprehensive and updated referral guidelines must be made ready to guide the PCP.

S1L2

WHAT DO GENERAL PRACTITIONERS WANT?

Assoc. Prof.(Adj) Datuk Dr. D.Thuraiappah
Chairman of Council
Academy of Family Physicians of Malaysia

To be euphemistic, the general practitioners want to be left alone to carry on as they are as they feel quite secure in their practice. They provide a service to the community, they are looked upon as respected leaders and somehow they survive. However, owing to the march of time, they feel encumbered by rising number of rules and regulations to practice, growing numbers of practitioners, the increasing numbers of medications to be used, the array of investigations and interpretations, an educated public and all the guidelines to practice, they feel that they are threatened and they want to withdraw into own coup. Their dilemma is that they do not want to change and yet they feel a need to change.

It is therefore ripe for a change and thereby lies the tale. When, how, where the change must be. Change must be evidenced based as much as possible. Internationally systems have changed, some for the good but none perfectly. The vision of one-care has been talked about but whether it can become a reality is the question.

The key to one-care healthcare system is financing like in any other business, capital has to be established. This factor has not been established in any of the discussions so far and therefore the general practitioners feel that they are being led up the garden path again. The general practitioners want a good universal healthcare system with a reasonable remuneration for their services.

S2L1

COLORECTAL CANCER: WHY, WHO AND HOW TO SCREEN

Dr Goh KL
Professor of Medicine & Senior Consultant Gastroenterologist,
Head of Gastroenterology and Hepatology, University Malaya Medical Centre, Kuala Lumpur

Colorectal cancer (CRC) is the most common gastrointestinal cancer in the world today. It is a "silent" cancer and is almost always asymptomatic at an early stage (when it is still curable). When detected at a precursor stage, it is preventable. It lends itself therefore to screening.

Screening can be divided into:

1. Individualized screening often done in clinical practice or
2. Mass population screening.

Colonoscopy is the best diagnostic test for CRC. However it is a fairly complex procedure and is inconvenient for patients. Furthermore expertise in the technique is limited. The procedure also carries a risk of complications albeit low. Colonoscopy is therefore usually limited to individualized screening. The fecal occult blood testing (FOBT) is often used as a pre-screening test for population screening. The guiac based FOBT has now been superseded in many places by the immunochemical fecal occult blood testing (iFOBT, FIT) which is a more accurate test. FOBT is often combined with flexible sigmoidoscopy on a yearly or 2 yearly basis.

Excluding those with hereditary polyposis syndromes, patients can be stratified to average risk and high risk CRC individuals. High risk patients are those with a family history of CRC, the risk increasing with the number of relatives having CRC. Broadly it is recommended that for high risk individuals, screening colonoscopy should be carried out 10 years earlier than incident age of CRC of the relative. Average risk individuals should have screening colonoscopy from the age of 50 years.

S2L2

DYSPEPSIA: WHAT THE PRIMARY CARE DOCTORS MUST KNOW?

Professor Dato' Dr P Kandasami,
Senior Consultant Surgeon & Professor of Surgery,
International Medical University.

Dyspepsia is defined as chronic or recurrent pain or discomfort centred in the upper abdomen. Discomfort is described as a negative feeling that is non-painful; often associated with a variety of symptoms which includes belching, bloating, fullness, burning or nausea. It is a common condition and accounts for 2 to 3 percent of primary care visits. Major causes of chronic upper abdominal discomfort include gastro oesophageal reflux disorder, gastritis, peptic ulcer disease, functional dyspepsia, biliary tract disease, chronic pancreatitis and motility disorders of the bowel. More sinister problems to be considered include malignancies of the stomach and pancreas. The initial evaluation primarily involves a comprehensive history, physical examination and some selected investigations. Unfortunately, symptoms of the underlying pathology often overlap and are non specific; and diagnosis becomes difficult. In a multi-ethnic Malaysian population the task is particularly challenging because language and culture influences the patient's history. This paper will address the common causes of dyspepsia in the Malaysian population, the challenges involved in diagnosis and the criteria for specialist referral.

P2

COMMON TROPICAL DISEASES– GLOBAL CHALLENGES

Dr Veena Kalra

P2

UPDATE ON MIGRAINE

Prof Dato' Dr Raymond Azman Ali,
Senior Consultant Neurologist,
University Kebangsaan Malaysia Medical Centre.

Migraine, the second commonest primary headache, is a disease of city dwellers. The cause of migraine remains unknown, but both genetic and environmental factors appear to be important. Migraine, affecting about 12% of the population is a major cause of time off work. Unlike tension headache, migraine is typified by discrete attacks of moderate to severe unilateral throbbing headache interspersed with periods of pain-free intervals of variable duration. The absence of concomitant nausea, vomiting, photophobia or phonophobia should suggest an alternative diagnosis. On the other hand, aura is present in only 10% of migraineurs. Acute attacks are treated with analgesics, ergotamine or 5HT1 agonists (triptans) plus antiemetics. When acute treatment is ineffective, the frequency of attacks affect daily activities, the risk of medication overuse is high or the migraine is complicated, prophylaxis with beta blockers, calcium channel antagonists, tricyclic antidepressants, 5HT2 antagonists or certain antiepileptic drugs, notably valproate and topiramate is indicated. Migraine prophylaxis also includes the identification and avoidance of known precipitating factors. Medication overuse headache occurs in migraineurs who overzealously self medicate themselves with analgesics or ergotamine. The greatest challenge in the management of headache is the identification and treatment of potentially dangerous and lethal secondary causes, including psychological factors, which are often overlooked by the inexperienced doctor who wrongly makes the diagnosis of migraine.

S3L1

HIGH RISK PREGNANCY- HAVE WE DONE ENOUGH?

Dr Krishna Kumar,
Senior Consultant Obstetrician & Gynaecologist,
Tuanku Jaafar Hospital, Seremban.

Maternal Mortality has plataeued over the last 10 years in Malaysia. We have managed to reduce the deaths from Postpartum Haemorrhage and Pregnancy Induced Hypertension but the deaths from Obstetric Embolism and Medical Disorders in Pregnancy have either stayed the same or have increased over the years. This can be partially contributed to the lack of thromboprophylaxis in high risk cases as well as poor pre-pregnancy care of women who are high risk with medical disorders prior to pregnancy.

In terms of perinatal mortality, we are reducing the rates at a very low rate as we have almost reached the levels of western countries. Here we can improve our mortality rates by working together between the health side, the obstetricians and the paediatricians in a cohesive manner that is best suitable for the local setting to best improve the care there. There should not be any barriers in the provision of care and there must be seamless services being provided by the health and hospital settings.

S3L2

MANAGING FEMALE URINARY INCONTINENCE IN PRIMARY CARE

Dato Dr Sivalingam Nalliah,
Professor of Obstetrics and Gynecology,
International Medical University.

Female urinary incontinence (UI) is prevalent at all ages but increases in frequency with increasing age. Three common conditions to be discussed include urge incontinence (also referred to as bladder overactivity syndrome (OBA), urinary stress incontinence (SI) and a mixed variety where both of these conditions prevail. As UI rarely carries high morbidity, patients tend not to see their care givers till the quality of life is affected. The primary care physician plays a gate-keeper role in screening patients, especially as women are seen as they approach the menopausal years, for urinary incontinence and another common problem i.e. vaginal prolapse. A simplistic approach with sufficient information derived from history and basic pelvic examination coupled with urinary analysis and midstream urine culture to exclude lower urinary infection would assist in categorization into one or both of the above conditions that lead to involuntary urine loss. It is prudent to emphasize that it is not necessary to refer all cases for expensive invasive tests to establish the diagnosis on first encounter. The criteria for referral would be discussed. As lower urinary tract infection would lead to detrusor overactivity culminating in increased frequency of micturition and confuse one with OBS, excluding this condition is important. Maintaining a urine flow diary (urine log) to cover both active and leisure days for about three days provides an objective evaluation tool.

Conservative approaches like avoiding caffeine, reducing fluids especially before bedtime and bladder training have been effective strategies for initial management of OBS. Supervised pelvic floor exercises for about 6 weeks have complemented conservative therapy. Antimuscarinic drugs are effective for OBS but compliance is essential. In selecting the drug one should consider cost and tolerability. Surgical therapy for OBA is rarely needed. The value of invasive urodynamic testing is better reserved for those who do not respond to these initial strategies. Where the mixed variety of urinary incontinence is present, the above strategies should be adopted first before addressing SI. Although SI can be diagnosed from history and clinical evaluation and demonstration of involuntary leak on coughing or exercise, many cases now have urodynamic filling cystometry done. Detrusor overactivity can be demonstrated together with demonstration of SI on demand. Although good improvement of symptoms have been seen with pelvic floor exercise, surgical approaches (colposuspension) have become popular as the success rate can exceed 85 % with tension free application of tapes at the mid-urethra.

This minimally invasive 'bottom up approach' has superseded the transabdominal Burch colposuspension which requires a large transverse supra-pubic incision and a longer period of hospitalization. Other methods like intraurethral injections of collagen and silicone and artificial bladder sphincters should be the domain of specialized units where colposuspension fails to control SI. Life style changes including weight reduction and advice on fluid ingestion and avoidance of caffeine containing beverages can be initiated at the first encounter. As the condition occurs in the older women, drug interactions of muscarinic agents and other medication taken for co-morbid disease should be borne in mind. In the non-compliant patient or where the approaches mentioned above cannot be applied, consideration for in-out or indwelling bladder catheterization would have to be considered.

S3L3

EYE PROBLEM: WHEN REFERAL IS INDICATED?

Dr Muhaya Hj Muhamad,
Professor and Senior Consultant Opthalmologist & Head of Department of Opthalmology,
University Kebangsaan Malaysia Medical Centre.

Detection of eye disease at an early stage can help prevent blindness. Common eye diseases that need to be referred are corneal ulcer, acute glaucoma, diabetic retinopathy and eye related macular degeneration. Precise and simple way of detecting these diseases will be highlighted and discussed in this presentation.

S4L1

RATIONAL ANTIBIOTIC PRESCRIPTION IN PRIMARY CARE

Dr Christopher Lee,
Senior Consultant Infectious Disease Physician & Head of Department of Medicine,
Sungai Buloh Hospital, Selangor.

One of the most pressing problems faced by healthcare services is the increasing prevalence of antimicrobial resistance. Compounded by a diminishing number of new agents in the pharmaceutical pipeline entering clinical practice, such resistance is widely recognized as a major threat to public health. In general practice, there are concerns that some common infections are becoming increasingly difficult to treat and that illnesses due to antibiotic resistant bacteria may take longer to resolve.

Some antimicrobial resistance may result from indiscriminate or poor use of antibiotics. In response, initiatives at the local, national, and international levels, are trying to promote "antibiotic stewardship," with the goal of improving the appropriateness of antimicrobial use. However, such initiatives depend on the continuing education of prescribers and patients for achieving any success, which has to be supported by high quality evidence linking antimicrobial use to the emergence of resistance. Awareness of the local resistance pattern is crucial is fostering support and buy-in among medical practitioners for antibiotic stewardship initiatives.

Although some countries have been successful in reducing primary care prescribing of antimicrobials, primary care is still responsible for the majority of antibiotics prescribed to people. Much of this use is in the treatment of suspected respiratory infection and levels of prescribing vary widely within and between countries, suggesting that further reductions are possible.

However, there are many barriers to reducing the inappropriate use of antimicrobials, including: patient and practitioner expectations, lack of patient awareness of the problems caused by antimicrobial resistance, and a perception in primary care clinicians and patients that antibiotic resistance is only a theoretical or minimal risk.

Rational antibiotic use is as important in primary care as it is in in-patient hospital care. The rationale of guidelines and practice in the management of community respiratory infections, the most common infection seen in primary care, would be discussed.

S4L2

WHAT'S NEW IN NASH, CHRONIC HEPATITS B & CHRONIC HEPATITIS C?

Dato' Dr Mrs S T Kew,
Professor & Dean of Clinical School,
Senior Consultant Physician & Gastroenterologist,
International Medical University

NAFLD & NASH

Non-alcoholic fatty liver disease (NAFLD) and progressive subtype Non-alcoholic steatohepatitis (NASH) are increasing global health problems. Studies have identified insulin resistance and intrahepatic oxidative stress as key pathophysiologic factors in the pathogenesis of NASH. NAFLD remains a diagnosis of exclusion. Patients are generally asymptomatic with mild to moderate, fluctuating elevations in liver enzymes. Ultrasound imaging, computerized tomography and magnetic resonance imaging can detect hepatic steatosis but cannot differentiate non-progressive from progressive form of NASH. Liver biopsy remains the gold standard for definitive diagnosis of NAFLD and NASH. Ten to fifteen percent of NASH patients progress to cirrhosis, liver failure and hepatocellular carcinoma. Lifestyle change with dietary modifications and exercise remain the cornerstone of management of NAFLD.

Chronic Hepatitis B infection

Chronic HBV infection is a dynamic state of interaction between HB virus, hepatocytes and patient's immune system. HBV replication is the key driver of disease progression, including development of cirrhosis and hepatocellular carcinoma. Conventional interferon-α therapy can reduce fibrosis progression, cirrhosis and HCC. Pegylated interferon and newer nucleos(t)ide analogs have better long term outcomes. The potential of HCC development is only reduced but not completely eliminated. Prevalence of HBV infection is declining due to successful vaccination. Unfortunately, cure rate i.e. loss of HBsAg or s-seroconversion for patients with CHB is relatively low with many requiring long term therapy. Potent antiviral drugs are recommended as first-line monotherapy. In case of resistance a second drug without cross-resistance should be added. HBV DNA is best used to monitor viral replication during therapy with nucleos(t)ide analogs. HBsAg level reflects the amount of virus in the liver cells, or the amount of infected hepatocytes.

Chronic Hepatitis C infection

Globally, more than 170 million people have chronic Hepatitis C infection with intravenous drug usage being the main risk factor for transmission. HCV is an important

cause of cirrhosis and HCC and is now the leading cause of liver transplantation worldwide. Pegylated interferon plus ribavarin is the current standard treatment. Asians have a higher likelihood of achieving a sustained virological response compared to Caucasians when treated with standard regimes but are more likely to get anaemia due to their diet and Thalassemia.

S4L3

CURRENT UPDATE ON TUBERCULOSIS MANAGEMENT

Dr Ashari Yunus,
Consultant Respiratory Physician (HLTx & SM),
Institute of Respiratory Medicine, Kuala Lumpur

Tuberculosis occurs worldwide and remains a leading cause of death. In 2005, 5 million new and relapse TB cases were reported to WHO, of which 2.3 million were sputum smear-positive pulmonary cases. However, it is estimated that nearly 9 million cases may have occurred worldwide, more than 95% in developing countries.

The mainstays of rapid diagnosis of tuberculosis are based on the clinical symptoms; chest radiography and sputum smear examination. Ultimate diagnosis rests on identification of M.tuberculosis in culture or demonstration of a definite clinical response to therapy. Promising diagnostic techniques such as those employing DNA amplication may have substantial impact on tuberculosis diagnosis in the future but are not currently in wide use. In most reported series , sputum smear examination is positive in 50-75% of patients with tuberculosis. Smears are more often positive in patients with cavitary disease and less often positive in patients with HIV infection who often present with manifestations of primary tuberculosis. Thus, when managing a patients with suspected tuberculosis whose sputum examination is negative, the clinician has two choices: institute therapy empirically and wait either for sputum culture results or clinical improvement or pursue further testing. The test commonly employed next is flexible bronchoscopy.

The aims of treatment of tuberculosis are to cure the patient, to prevent death, to prevent relapse, to reduce transmission and to prevent the development and transmission of drug resistence. Current therapy for pulmonary tuberculosis is based on several short-course regimens developed in the 1970s and 1980s. The induction phase of chemotherapy consists of 2 months of isoniazid, rifampicin, pyrazinamide and ethambutol or streptomycin followed by 4 months of continuation therapy with isonaizid and rifampicin. Used of this regimen to treat drug –susceptibilty pulmonary disease should be associated with 100% cure rate and a relapse rate of no more than 3.5%.

Compliance to anti tuberculosis regimens is a complex process. Individual non compliance can lead to spread of infection and the development of drug-resistant strains of mycobacterium. The main causes of non compliance to antituberculosis regimens are the treatment continues for a long time after symptomatic improvement, the side effects of the anti tuberculosis drugs , and several social factors and comorbid conditions. There are some efforts to improve patients compliance to anti tuberculosis regimens such as programs of directly observed therapy (DOT), fixed-dose combinations (FDCs) and introduced the WHO-recommended formulations of anti Tuberculosis drugs.

P3

WHAT'S NEXT WHEN COMMUNICATION FAILS?

Dato' Dr Hjh Zailan binti Dato Hj Adenan,
State Health Director,
Negeri Sembilan State Health Department.

S5L1

HERBAL MEDICINE: WHAT WORKS AND WHAT DON'T

Ms Lee Ching Yan,
Pharmacist, Sultan Ismail Hospital, Johor Bahru

A recent survey revealed that the Australians had seemingly more frequent visits to complementary and alternative medicine (CAM) practitioners, expenditure per year on CAM products accounts for almost half of the expenditure per year on non-government-subsidized health-related products. In a cross-sectional survey, 67.9% of 250 medical in-patients in Penang Hospital were using herbal medicine and conventional medicine concomitantly; 51.3% reported for health maintenance purpose.

Therapeutic and adverse effects can be mediated by different pharmacological effects e.g. St John's wort (SJW) modulates serotonin receptors pharmacologically whilst induces hepatic cytochrome 450 enzyme activity. Herbal synergy is an intrinsic concept of naturopathic philosophy. Evidence of safety and efficacy should be extract-specific e.g. most Gingko trials were done on Egb-761 and LI-1370. SJW is the most tested medicinal herb with over 30 controlled trials involving 3000 patients. In patients suffering from depression and anxiety, sleep disturbances, early dementia and decreased cerebral circulation, herbal medicine have an accepted place side by side with synthetic pharmaceuticals.

Significant scientific & empirical evidence shows that herbal medicine and nutrient favourably improve patient outcomes in ischemic heart disease. Herbs are used commonly for respiratory, gastrointestinal/endocrine disorders, and pain/rheumatism. Knowledge of drug-herb interactions, adverse reactions or toxicity ensures the use of treatments safely and appropriately. Paucity of rigorous clinical trials for many herbs and product variability does not preclude the use of accurate and current information on herbal efficacy. True to all medicines and therapies, if an intervention is supported by good evidence then it should become part of good practice especially when benefits outweigh risks.

S5L2

ENT PROBLEM: WHEN TO REFER

Associate Professor Dr Rahmat Omar
Head of Department, Department of Otorhinolaryngology, Head and Neck Surgery,
University of Malaya Medical Centre, Kuala Lumpur.

Primary care and family physicians commonly encounter ENT problems which needs a wise decision-making whether to continue and follow-up further, or to refer cases for further management. Recognizing symptoms and signs of these more serious than usual presentations, inappropriate response to treatment and sign of complications are crucial. High index of suspicion and timely referral could avoid unnecessary treatment, side effects of medications, and minimize the potential morbidities and possibly fatal complications. The related ENT conditions which need to be referred will be presented with relevant real case photos and videos.

S6L1

MANAGING ACUTE PSYCHOSIS IN PRIMARY CARE

Dr Zainab Abd Majeed,
Consultant Psychiatrist & Senior Lecturer,
International Medical University

Acute psychosis as manifested by perceptual, thought, mood or behavioural disturbances can be classified as primary or secondary psychotic disorder. Medical conditions must be excluded especially in patients presenting with first episode psychosis. Choice of treatment depends on the clinical manifestations and underlying causes. In general, atypical antipsychotic medications are considered as the first line therapy. This session will discuss steps that to be taken when handling an acute psychotic patient.

S6L2

HOW TO IDENTIFY ILLICIT DRUG USER IN YOUR CLINIC?

Dr Norsiah Ali
Consultant Family Medicine Physician (Addiction Medicine),
Tampin Health Clinic, Tampin, Negeri Sembilan

The magnitude of impact related to illicit drug use is increasing worldwide. Problem drug use remains about 0.6% (26 million) of the global population aged 15 to 64 years old. In Malaysia, the estimated number of drug users is almost 1 million. The commonest illicit drug used in the world so as in Malaysia is cannabis, followed by heroin and psychostimulants. However, the use of psychostimulants is increasing. Illicit drug use gives multiple implications such as social, economy, legal and medical implication. Illicit drugs can be classified as depressants, stimulants and hallucinogens. Examples of depressants are heroin, morphine, cannabis and benzodiazepine. Stimulants that commonly use in Malaysia are such as amphetamine type stimulants (ATS), methamphetamine, methylenedioxymethamphetamine (Ecstacy) and ketamine. Hallucinogens are such as lysergic acid (LSD) and phencyclidine (PCP). Drug users showed various physical manifestations when during intoxicated phase and during withdrawal phase. The clinical presentations may mimic certain medical conditions and tend to differ among various types of addictive substances. Patient with illicit drug use issue may come to health clinic with symptoms and signs due to intoxicated or withdrawal from the substance. Cannabis user can present with maladaptive behavioural symptoms, hyperemesis syndrome, recurrent nausea, colicky abdominal pain, delirium and conjunctival injection. Heroin toxicity can mimic clinical features of pontine haemorrhage. Psychostimulants user can mimic mania or acute psychosis during withdrawal phase and can present as depression/dysphoria and chronic lethargy in chronic protracted phase. Ketamine can cause sudden impaired consciousness, abdominal pain and acute urinary symptoms such as dysuria and urgency. Patient may also come with illnesses related to drug use such as blood borne viruses, skin disease or as psychiatric illnesses. A family member of patient with illicit drug use may also come to clinic with stress related issues. Currently, drug addiction is regarded as a disease hence requires medical treatment and certain intervention. Failure of Primary Care Physician to identify patients with illicit drug use will end up with ordering a battery of laboratory investigations unnecessarily. Hence it is important for Primary Care Physician as point of first contact and gatekeeper to know various clinical manifestations related to certain illicit drugs so that appropriate help can be given early.

P4

TEEN STRESS: IS IT DISTRESS?

Dr Iskandar Firzada Osman
Consultant Family Medicine Physician (Adolescent Health)
Jaya Gading Health Clinic, Kuantan, Pahang.

Adolescent has always been perceived and associated with period of chaos, turmoil and turbulence. This is far from the truth for the majority of them. It's a period where they need to swiftly adapt to the major physical, cognitive, emotion and social change and challenges set upon and expected of them. Being resilient enable them to cope with the stressors but unable to adapt will result in distress which will flourish into maladaptive behaviours. This presentation will look into the major stressors in teen and tips on coping with it and recognising distress and tips on how to intervene it.

S7L1

OSTEOARTHRITIS: WHEN IS SURGERY INDICATED?

Mr Bernard Devadason
Consultant Orthopaedic Surgeon,
Tuanku Ampuan Najihah Hospital, Kuala Pilah.

Update in Management of Osteoarthritis (OA) At Primary Care Level

History and examination is of profound importance at primary care level. Any of the indications mentioned, inflammatory arthritis, metabolic, calcium pyrophosphate di-hydrate deposition disease, synovial chondromatosis and sero –ve spondarthropathy lead to OA. Why Gout? There has been a large increase in the last 20 years due to altered dietary trends, obesity, metabolic syndrome, end-stage renal disease and the use of specific drugs are important in its management. Availability of blood investigations and x-ray would certainly pave the way to confirming the diagnosis in the management of osteoarthritis at the primary care level. A review of the GAIT trial Glucosamine Hcl and Sodium chondroitin sulfate and use of NSAIDs and COX-2 inhibitors and recent interest in Multimodal Analgesics and pain pathways has a role in early OA with a primary endpoint of improvement in pain. Arthrocentesis of the joints can be dealt with at primary care level with knowledge of anatomy of the joint and with a learning curve to know its indications, limitations and contraindications. Various agents are in the form a viscoelastic hydrogel in the market and a review of which is biologic in terms of viscosupplementation and viscoabsorbtive will be discussed. Review of research in Stem Cells Engineering in Orthopaedics for Chondral Cartilage Damage and Platelet Rich Plasma (PRP) with diagnostic Raman spectroscopy and classifications are necessary to evaluate the need for surgery or interventional biologic treatment of OA.

Indication for Referral & Surgery

Pain, no relief with analgesics, life style diminished, and diagnosis in doubt can bring success to early intervention by surgery. 25% patients already have erosions at the first visit because joint erosions occurring early in rheumatoid arthritis (RA). Radiographic progression of joint erosions particularly in RA utilizing ultrasonography can alter the natural course of OA or indications for surgery. Indications for total knee replacement (TKR) and total hip replacement (THR) is to relieve pain, provide motion with stability and correct deformity. RA, regardless of age, including JCA and post traumatic OA, are indications for surgery even in the younger patients. *Glenohumeral Osteoarthritis of shoulder* is mostly preceded by trauma, dislocation, humeral neck fracture and rotator cuff tears with overhead stress and are indications for arthroscopic surgery.

How common is low backpain(LBP)?

85% LBP cannot be given a precise diagnosis and it is the most expensive work-related disability among people <45 years old. It can be confined to the spine or part of a systemic disease. It becomes only a surgical emergency in Cauda Equina Syndrome. Often malingerers can be diagnosed by doing a Waddell sign Test. Indication for referral would be when there is pain and neurological symptoms.

Precaution and Advice At Primary Care Level For Patients Who Underwent Joint Replacement Surgery

Persistent symptoms of pain or discharge will be suspicious of instability or infection. Poor wound healing can occur in association with rheumatoid arthritis secondary to anti-rheumatic drugs. 35 - 40% of infection is due to Staph aureus. DVT as evident on venography is present in 50 - 70% of patients and asymptomatic pulmonary embolism in 17% of patients will require prophylaxis with warfarin. Loss of quadriceps power and limited range of motion (ROM) will not improve function and various types of physiotherapy can be advised to improve joint replacements.

S7L2

DRUGS IN CHRONIC PAIN-WHICH TO CHOOSE?

Dr Mary Suma Cardosa,
Consultant Anaesthesiologist and Pain Specialist,
Selayang Hospital, Selangor.

Before choosing a drug for a patient with chronic pain, a thorough assessment of the patient and his/her pain is essential. Assessment is aimed not only at making a diagnosis, but also to determine the impact of the pain on the patient's mood and activities as well as the patient's understanding of his/her pain and his/her coping abilities.

In order to be effective, management of chronic pain should take a multimodal approach, which includes not just pharmacotherapy but also a regular exercise program and the use of psychological approaches like relaxation as well as understanding and reconceptualising the pain (where chronic pain is different from acute pain). The goal of treatment should not be pain relief per se, but also improvement in function and mood.

Medications used differ according to whether the pain is neuropathic or nociceptive – for neuropathic pain, anticonvulsants and antidepressants are more appropriate, while paracetamol and opioids are the drugs of choice for nociceptive pain. Any analgesic medication should be given on a regular basis rather than a "PRN" basis and the patient is also encouraged to learn more active coping methods like activity pacing, planning and problem solving.

Options for analgesic medications are also limited by long-term considerations; for example, NSAIDs or COX2 inhibitors cannot be used for more than a few days to a few weeks due to the risk of gastric, renal and cardiovascular side effects which are higher with long term use. In chronic pain patients, NSAIDs may only be used for short periods of time to help patients cope with flare-ups.

The most appropriate analgesics for nociceptive pain are paracetamol and tramadol, at the lowest possible dose. If the patient reports high levels of pain, we may use high doses (up to 100 mg QID of tramadol and 1 gram QID of paracetamol) but we should try to reduce the dose of drug once the patient's pain is more under control and the patient has started doing some exercise and relaxation and other self management strategies. This is to preempt the problem of development of tolerance to tramadol which will eventually result in dose escalation. Side effects of constipation and nausea/vomiting may also limit the use of tramadol; when used for chronic pain, respiratory depression is not a problem. At times, the patient may need strong opioids if tramadol is insufficient to control the pain, but these patients should be referred to a multidisciplinary pain management clinic.

S8LI

BROADENING PERSPECTIVES IN PARKINSON'S DISEASE.

Dr Lim Shen-Yang,
Consultant Neurologist,
University Malaya Medical Centre.

With the advent of dopamine replacement therapy, the quality of life and lifespan of patients with Parkinson'sDisease (PD) have improved considerably. Nevertheless, patients usually still experience disabling symptoms, especially in the later stages of the disease. Features of advanced PD include axial motor features (dysarthrophonia, dysphagia, imbalance and falls), dementia and psychosis. Many other problems reduce quality of life, for example anxiety and depression, urinary problems or severe constipation. These can be treated successfully in only some cases with available treatments. Many of these problems have a non-dopaminergic basis.

This talk will provide an overview of recent advances in the understanding of PD symptoms and disease progression, including knowledge regarding the anatomical and biochemical substrates of disease features. Topics that will be covered include dopamine deficiency & (motor) parkinsonism, extra-nigral / non-dopaminergic features of PD, disease progression and the Braak hypothesis. The relative contribution of disease vs. antiparkinsonian medication effects in the pathogenesis of non-motor symptoms will be discussed.

Implications on diagnosis and treatment will be highlighted. A good understanding of the underlying basis of disease features, and of benefits and potential side effects of medications, is important to provide optimal patient care.

S8L2

CARE OF GREY MATTER

Dr Yau Weng Keong,
Senior Consultant Physician & Geriatrician,
Geriatric Unit, Department of Medicine, Kuala Lumpur Hospital.

Alzheimer's disease (AD) is a neurodegenerative disease that has a progressive cognitive decline that impairs both daily living activities and quality of life of patients and their family members. The psychiatric and behavioural problems can be very distressing and naturally the burden of AD is huge. The economic impact on the families and on the world itself is enormous. Not surprisingly sufferers have the impression that having AD means the end of the road.

Our increasing understanding of the pathogenesis of AD is directing the future study of potential disease-modifying therapies. The proposed pathways leading to the development of AD suggest that amyloid beta formation and tau caspase cleavage are potential therapeutic targets in AD. The main challenge is to choose the right biochemical target for drug discovery because of complex neuropathology of the AD brain. Whether treatment of AD will require multiple medications like coronary heart disease, or will yield to a single treatment, remains unclear. This is because currently the aetiology of Alzheimer's disease remains elusive**,** although considerable progress has been made in understanding its biochemical and genetic mechanisms. The next decade will see an expansion of new armamentarium of new strategies for treatment and prevention of AD.

Although the management of AD has improved significantly in the past decade, there are still many unmet needs centring on the key areas of treatment and patient/carer support.

Some unmet needs include:

1. improving diagnosis, to allow early treatment of people with AD
2. developing an effective prophylactic, to prevent the onset of AD
3. developing treatments to cure, or at least modify, AD to help preserve quality of life
4. helping patients to cope with their dementia symptoms and promoting independence
5. providing care for the steadily increasing number of patients with dementia, and meeting the cost of long-term care
6. supporting the carers of patients with AD, who are themselves at a high risk of physical and mental illness.

The symposium paper will try and look into some of these unmet needs

P5

NEW MODALITIES IN TRADITIONAL & COMPLEMENTARY MEDICINE IN MALAYSIA

Dr Ramli Abd Ghani
Director of Traditional & Complementary Medicine, MOH, Malaysia

Malaysia has a rich heritage of various traditional medicine practices, each according to the ethnic origins of its population. Recognizing the importance and widespread use of Traditional & Complementary Medicine (T&CM), the Ministry of Health (MOH), Malaysia has launched the National T&CM policy in 2001 (revised 2007) with a vision to eventually integrate T&CM into the Malaysian healthcare system apart from ensuring safety of products and practices. Currently in Malaysia, more than 30 modalities of T&CM are being practiced. In many parts of the world, we have seen similar upward trends in using T&CM services. Regulators worldwide are addressing the safety issues in different ways. Some frameworks favour self-regulation by the T&CM professional bodies while others focus on central government control through legislation. In Malaysia T&CM Bill was drafted with the aims of ensuring consumer safety, standardization in training and education and promoting professionalism in T&CM practices. The legislation will replace current self-regulation in the very near future. The existing and new modalities of T&CM will be addressed appropriately in the presentation.

S9L1

GENITOURINARY INFECTIONS: MODIFIED SYNDROMIC APPROACH (MSA)

Dr Leelavathy a/p Muthupalaniappen,
Associate Professor and Consultant Family Medicine Physician,
Department of Family Medicine, Universiti Kebangsaan Malaysia.

Sexually transmitted diseases have a major impact on worldwide adult morbidity. Syndromic approach is a simple and yet cost effective approach to identify and manage curable sexually transmitted diseases at primary care setting. It was first introduced in 1991 by WHO and used widely in both developing and low income countries. In Malaysia, the adapted version of the modified syndromic approach is used to address common local sexually transmitted infections. This approach facilitates easy access to STD services, rapid treatment, education and treating partners without the requirement of sophisticated laboratories. Management of STIs is based on clinical presentation of common infections which are grouped according to clinical syndromes. In Malaysia three syndromes have been identified; vaginal discharge (Trichomonas, Candidiasis, Gonorrhea, Chlamydia), urethral discharge (Gonorrhea, Chlamydia) and genital ulcer (Syphilis, Chancroid, HSV). The infective cause identification is based on the symptoms described by patient and the

clinical signs observed by health care provider. Simple flow charts facilitate the identification, management, counselling for risk modification and notification. These details of this information are given in the third edition of Malaysian guideline in the treatment of sexually transmitted infections published in 2008.

S9L2

COSMETIC DERMATOLOGY COMING OF AGE

Dr. Koh Chuan Keng,
Consultant Dermatologist,
Koh Skin Specialist Clinic, Kuala Lumpur

We live in a very fast, dynamic and demanding world. Our patients now are no longer happy with just being healthy but peer pressure demands that they must look good as well. They notion of imperfections and growing old gracefully is being rejected by many of our urban elite. Dermatologists in Malaysia have risen up to the challenge and are at the forefront of offering cosmetic dermatology to our patients. Cosmetic Dermatology is currently included in the training of future dermatologist. The use of chemical peels, botox, fillers, lasers, IPL and many other treatments is too wide to be covered in one talk. I will focus on the use of Intense Pulse Light (IPL), Fractional Erbium Laser and Q switch Nd Yag Laser in my lecture, highlighting results and pitfalls from such procedures.

S9L3

CUTANEOUS MANIFESTATIONS OF SYSTEMIC DISEASES

Dr. Najeeb Ahmad bin Mohd Safdar,
Senior Consultant Dermatologist & Head of Department,
Tuanku Ja'afar Hospital, Seremban.

The skin is not only the largest organ of the body but also the most accessible. It is considered the mirror of internal organs and can be used to ascertain the fundamental mechanisms of diseases. The skin exhibits important clues to diseases in other systems and a comprehensive overview of various cutaneous manifestations of HIV, gastrointestinal, renal, hematologic, endocrine, metabolic, nutritional and connective tissue diseases will be presented.

S10L1

INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS (IMCI) FOR CHILD SURVIVAL

Dr Wong Swee Lan,
Senior Consultant Pediatrician,
Tuanku Jaafar Hospital, Seremban.

IMCI is a strategy developed by WHO and UNICEF with the objectives to reduce death and frequency and severity of illness and disability in children, and to contribute to their improved growth and development. It focuses on 5 conditions, pneumonia, diarrhoea, measles, malaria and malnutrition, that contribute to 70% of the 10 million deaths each year in children less than 5 years old. These conditions are also the reason for seeking care in 75% of sick children who come to a health facility

There are 3 components to the IMCI strategy. These are improvement in the case management skills of the health staff through the provision of guidelines and training, improvement in the health system for the effective management of childhood illness and improvement in family and community practices.

The benefits of IMCI are many. In the health facilities, it promotes the accurate identification of childhood illnesses, ensures appropriate combined treatment of all major illnesses, strengthens the counselling of care providers and the provision of preventive services, and speeds up the referral of severely ill children. In the home setting, it promotes appropriate care seeking behaviours, improved nutrition and preventive care, and the correct implementation of prescribed care.

The World Bank World Development Report Investing in Health, estimated IMCI to be the group of interventions with the potential to have the greatest impact on the global burden of disease and ranked it among the 10 most cost effective interventions in low and middle income countries.

IMCI was introduced to Malaysia in 2000 with the conduct of the first course in Kota Kinabalu. The strategy is now implemented in Sabah, Sarawak and Pahang. This year we are working on expansion of the strategy to Kelantan, and to introducing it into pre-service training of nurses and assistant medical officers.

S10L2

THE CHILD WITH LEARNING DISABILITY - LEARNING THE SECRET

Dr Juriza Ismail ,
Consultant Paediatrician (Developmental) & Senior Lecturer,
University Kebangsaan Malaysia Medical Centre.

Learning disability (LD) referred to a group of disorders that affect a broad range of academic and functional skills including the ability to speak, listen, read, write, spell, reason and organize information. It is a hidden disability and often being overlooked. It is not indicative of low intelligence. The aetiology of LD is influenced by genetic, environmental, infectious and perinatal factors. In assessing the child with LD it is important to exclude other disabilities such as visual, hearing or motor disabilities, emotional disturbances, environmental, cultural or economic disadvantages. Family physician being the front liner plays an important role in identifying the warning signs in the pre-school and school-age children. Early detection and referral will help the children to achieve their maximum potentials through early and appropriate interventions.

S10L3

THE CHILD WITH FEVER AND RASH

Dr Kamarul Azhar
Senior Consultant Paediatrician,
Paediatric Institute, Kuala Lumpur.

The role of the primary care physician (PCP) as an effective gatekeeper in this challenging era of good clinical practice deserves a re-appraisal of one's role in bridging the care between the community and hospital based settings.

The child presenting with fever and rash provides a clear example of the PCP's role in medicine. Medical emergencies such as meningococcaemia and dengue shock syndrome; where urgent resuscitation and prompt parenteral antibiotic institution are potentially life saving measures; can be the first presentation to confront the PCP. Immediate hospitalization and a diligent continuum of care ensure survival potentials.

Though infectious diseases form the bulk of aetiologies; collagen vascular, haematology-oncology, drugs and a multitude of miscellaneous causes including PUO; can manifest with febrile rash.

Adequate and recent ‘know-how’ in clinical acumen, public health measures, infection control, antibiotic prescribing and supportive care warrants the PCP to have up to date knowledge on this common symptomatology.

This session hopes to equip the PCP with information and the practicalities to manage the child with fever and rash.

ABSTRACTS

FREE PAPERS

(ORAL PRESENTATIONS)

OP1

CHARACTERISTICS OF PREGNANT ADOLESCENTS RESIDING IN A GOVERNMENT SHELTER HOME

Tan Pei Sun[1], Kevin Tan Teck Meng[1], Su Xu Vin[1], Hizlinda Tohid[2], Nor Azimah Muhammad[2], Khairani Omar[2]

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Background: Adolescent pregnancy has emerged to be a significant public health and social issue as a result of increasing prevalence of adolescents involved in sexual activities.

Objectives: This study aimed to identify the characteristics of pregnant adolescents residing in a government shelter home. Their reasons of pregnancy, sources of information on contraception, future plans and their views on abortion were explored.

Methods: A cross sectional study was performed on all 26 pregnant adolescents in the centre using a self-administered questionnaire modified from the one used in the United Nation HIV/AIDS Malaysia PAF Project.

Results: Eighty-five percent of the adolescents were older adolescents aged 15-19 years old. Most adolescents (53.8%) came from low income families, although 73.1% of them were from urban areas. Seven adolescents had received lower than expected level of education because they dropped out from their schools. Consensual sex with their partners was the commonest reason of pregnancy reported by 63% of them. Many teenagers (50%) acquired information regarding contraception from their friends or partners. Fifty-four percent of them had considered abortion during their pregnancy. Adoption was the common future plan shared by 40.7% of them.

Conclusion: Strategies should focus on adolescents who come from poor urban families, including drop-outs. These strategies should include education about contraception and unsafe abortion. In addition, increasing the availability of rehabilitation centres and promotion of pro-life belief may be considered as strategies to prevent abortion. A reliable and efficient adoption agency that governs legal adoption is also required as adoption is a common desired option among pregnant adolescents. Thus, exploitation of these adolescents and malpractices such as child trafficking and sales of children can be prevented.

OP2

FAMILY PHYSICIANS PERCEPTION OF THEIR KNOWLEDGE IN CHILD MENTAL HEALTH

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Background: Mental health problems in children and adolescents have long term implications to individuals, families and communities. Current epidemiological data indicates a high prevalence of about 20% of children and adolescent with mental health disorders and this is reflected in Malaysia health morbidity study 2006. Many of these children are not seen by and do not need specialist services as their problems can be dealt with within primary care. As family physicians come into frequent contact with children and families they are in a position to identify many of these children in the course could provide more information regarding the perceived knowledge in child adolescent

Objectives: To determine the family physicians' perception of their general in child mental health

Methods: It is a descriptive, cross sectional study over a period of 3 months in 2008. It is questionnaire based with a mixture of close and open ended questions. The sample comprised of Family Medicine Specialists in Malaysia who are working in the government sector. The survey was done through post. The quantitative data was analyses statistically using SPSS. Descriptive statistics was used to analyses the perception of knowledge.

Results: There was a 63.1% respondent rate with majority having had more than 5 years' experience. The majority of family physicians perceived their knowledge in physical development to be good whilst poor in areas of emotional and moral
development. Respondents generally perceived they had moderate and good knowledge on the more frequent problems at primary care like anxiety and depression compared to the less frequent problems.

Conclusion: The study revealed, there are areas like pervasive developmental disorder and eating disorder where there is perceived lack of knowledge. Thus training in these areas needs to be looked into.

OP3

HYPERTENSION MANAGEMENT IN PUBLIC PRIMARY CARE SETTING: ARE WE FOLLOWING THE GUIDELINES?

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Background: Hypertension is the most common chronic condition being managed in primary care. The clinical practice guideline recommends that management of hypertension should not be based on the level of blood pressure per se, but on the global cardiovascular risks stratification. Despite this succinct recommendation, cardiovascular risk assessment in hypertensive patients is often inadequately conducted in clinical practice.

Objectives: To assess the adequacy of hypertension management of patients attending the public primary care clinics in relation to the current clinical practice guideline recommendations.

Methods: A clinical audit was conducted in 2 public primary care clinics in Selangor in March – April 2011. Hypertensive patients on pharmacological treatment who attended the clinic within the 6-week study period were identified through their prescription slips at the pharmacy. Medical records of these patients were then retrieved. Only those who have been recorded to be seen at least twice by a doctor in the last 1 year were included. Patients who have co-existing diabetes mellitus were excluded. Approximately 20% of the medical records which fulfilled the inclusion and exclusion criteria were selected at random from each clinic. Five structure, 16 process and 1 outcome criteria were assessed. The 5 structure criteria were set based on the elements of Chronic Care Model. The 16 process and 1 outcome criteria were set based on recommendations made by the Malaysian CPG of Management of Hypertension 2008. Adequacy standards of 100% for 5 structure criteria and 50% for each of the process and outcome criterion were set in collaboration with the local district health office. Data were analyzed using the SPSS software version 17.0.

Results: A total of 514 (22%) were included out of 2347 eligible hypertensive patients. Mean age was 58.6 years (SD±11.6, range 26 to 91 years), of which 55.6% were females and 44.4% were males. Adequacy standard was achieved in only 1 structure criterion (hypertension registry). Standards were not achieved in the other 4 structure criteria (comprehensive medical record keeping, comprehensive patient self-management record, use of multidisciplinary team and, availability of clinical practice guideline or quick reference in each consultation room). Adequacy standards were achieved in 3 of the process criteria (BP recorded at least twice in the last 1 year (100%), Fasting Serum Lipid

done at least once in the last one year (53%) and Renal Profile done at least once in the last one year (55%). The adequacy standards vary from 0.4 to 39.1% in the other process criteria (recording of smoking status, body mass index, waist circumference, presence of target organ complication, family history of premature CVD, ECG, liver function test, urinalysis for protein and/or microalbumin; and advice on diet, exercise and smoking cessation). Adequacy standard of 56.6% was achieved in the outcome criterion (average BP of <140/90mmHg over 1 year).

Conclusion: This audit shows that the adequacy standards of hypertension management in these primary care clinics were suboptimal. Although BP was controlled in 56.6%, cardiovascular risks were not adequately assessed in the majority of the patients audited. Remedial measures were discussed with the local district health office and a re-audit will be done following implementation of remedial actions.

OP4

MORBIDITY PROFILES AT THREE PRIMARY CARE CLINICS IN PERLIS, MALAYSIA.APPLYING JOHNS HOPKINS ACG® CASEMIX SYSTEM ON TPC® ELECTRONIC PATIENT RECORD

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Background: ACG® Casemix System is used to profile the morbidity patterns of a particular population and can be utilised to reimburse healthcare providers based on the health needs of the population they serve. In collaboration with Johns Hopkins University, USA, a project is undertaken to study the feasibility of implementation of case-mix in Malaysian primary health care, using available data from Teleprimarycare (TPC®), an electronic clinic management and clinical information system.

Objectives: The aim of this report is to describe the morbidity profiles of patients in three public primary care clinics in Perlis and to assess the variations of morbidity pattern. This exercise also helps to find out the completeness of TPC® electronic data in regards to morbidity coding.

Methods: Data extracted from TPC® system were unique patient ID by clinic, sex, age, ethnicity, ICD-10 diagnosis codes, WHO ATX drugs codes, pharmacy cost and total cost consumption. All data were based on individual patient's visit records for year 2010. Three different types of morbidity profiling which embedded into the system are presented.

Results: A total of 73,236 unique patients were registered in all three TPC® clinics in Perlis for the year 2010. The top three Expanded Diagnosis Cluster (EDC) groups were Acute Upper Respiratory Tract Infection, Hypertension without Complication and Preventive Care at 23.18%, 12.70% and 7.19% respectively. Time Limited: Minor Primary Infection formed the highest proportion of Aggregated Diagnosis Group (ADGs) at 27.35%, followed by Chronic medical: Stable at 21.02% and Sign/Symptoms: Minor at 13.11%.Based on Pharmacy Defined Morbidity Groups (RxMG), the highest grouping was General Sign and Symptoms/Pain and Inflammation at 49.61%, Respiratory / Acute Minor at 25.14% and Allergy/Immunology/Acute Minor at 23.69%.There were significant variations of Standardized Morbidity Ratios (SMR) among clinics for most of different types of morbidity profiling. In general those diagnoses with recognized objective diagnostic criteria were recorded with more consistent prevalence especially common chronic diseases than those without like acute illness and signs and symptoms.

Conclusion: This study revealed there were variations of morbidity among these three public primary care clinics and the data from TPC® electronic record although not perfect but suitable for performing morbidity profiling and case mix evaluation.

OP5

PREDICTORS OF UNCONTROLLED HYPERTENSION IN 70,848 ADULT TYPE 2 DIABETES MELLITUS IN MALAYSIA

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Background: Hypertension was the most often co-morbid of diabetes mellitus. Uncontrolled blood pressure was undoubtedly a significant contributor of morbidity and mortality amongst the type 2 diabetes (T2D) patients.

Objectives: This study was to determine the control and treatment profile of the adult T2D hypertensive patients in Malaysia.

Methods: This was a registry based study where participation was voluntary and mainly from government primary health care clinics. We captured data from the largest diabetes cohort in this country. The online Adult Diabetes Control and Management (ADCM) which was started in 2008 included all type 2 diabetes patients aged 18 years old and above. Demographic data, details on diabetes, hypertension and their treatment modalities, as well as various risk factors and complications were reported and updated annually.

Results: A total of 303 centres participated and contributed a total of 70848 patients. Fifty-nine percent was female. Malay consisted of 61.9%, Chinese 19% and Indian 18%. The mean age at diagnosis of diabetes was 52.3 years old (SD 11.1) and the mean duration of diabetes was 5.9 years (SD 5.56). The means systolic and diastolic blood pressures (BP) were 136.7 mmHg (SD 19.53) and 78.8 mmHg (10.64) respectively. A total of 40659 (57.4%) were reported to be hypertensive. Out of 56503 BP measurement recorded, 21 610 (38.2%) patients had BP ≤130/80 mmHg. Health clinics without doctor, older age, shorter duration of diabetes, Malay, obesity were predictors for uncontrolled blood pressure (BP ≥130/80mmHg) ($p<0.001$). There were 41286 (58.3%) patients on anti-hypertensive agents. Angiotensin-converting enzyme inhibitors (ACEI) (63.9%) were the most prescribed anti-hypertensive, followed by calcium channel blockers (CCB) (37%) beta-blockers (36.5%) and diuretics (23.4%). Eighteen percent was on more than two anti-hypertensive agents. All anti-hypertensives and their combinations were predictors of uncontrolled BP (OR 1.20-1.82, $p<0.001$) except two combinations of anti-hypertensives

consisted of a CCB with either ACEI (adjusted OR 1.06 95% CI 0.984 to 1.141, p=0.125)or angiotensin receptor blocker (adjusted OR 1.20 95% CI 0.935 to 1.534, p=0.153).

Conclusion: Hypertension control amongst the T2D was less satisfactory. The choice of drugs was appropriate but inadequate. Combination of an ACEI and CCB was most efficacious in bringing blood pressure to target. More effort and resources are needed to improve diabetic hypertensive care in this country especially in the primary healthcare.

0P6

THE AWARENESS AND EFFECTIVENESS OF THE NATIONAL 'NOT-SMOKING' CAMPAIGNS ('TAK NAK CAMPAIGN')

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Background: In Malaysia, it is the aim of the Ministry of Health to overcome the threat of increasing rate of smokers. Hence, the national "Not Smoking' campaign was launched in early 2004 where RM 20 million was allocated to this programme yearly for 5 consecutive years. Since then, there were different views regarding the success of the campaign.

Objectives: The objectives of our study was to assess the public awareness and effectiveness of the public health promotion campaign in people attending an urban primary health care centre as well as identifying the other more effective methods available to prevent smoking.

Methods: This is a cross-sectional quantitative study conducted in Klinik Kesihatan Seremban from December 2009 to April 2010. Structured interview was performed on attendees of the outpatient department. The survey consisted of questions on demographic data, relevant questions related to awareness and effectiveness of campaign, Fagerstorm Test for smokers and opinion on methods to quit or prevent smoking.

Results: 305 completed questionnaires were analysed. There are 29.5% current smokers and 93.4% of respondents are aware of the campaign with television as the most effective media (65.9%). Total of 43% thinks the campaign is effective and only 34.5% of the ex smokers had successfully quit smoking due to the campaign. Medical advice from doctors remain the most effective method (35.7%) and 62.8% felt total ban of cigarette sales is beneficial.

Conclusion: We found that majority of the participants are aware about the existence of the 'Tak Nak' campaign. However, slightly less than half of the participants think the campaign is effective in helping people to quit smoking. Majority of them think that total ban of cigarettes is the most effective method to discourage smoking.

OP7

BLOOD PRESSURE CONTROL AND TREATMENT PROFILE AMONG HYPERTENSIVE PATIENTS WITH DIABETES MELLITUS AND WITHOUT DIABETES MELLITUS IN PRIMARY HEALTH CARE CLINIC

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Background: Hypertension is prevalent globally. The target blood pressure control is achieved only in one-third of hypertensive patients. It is a common co-morbidity among diabetic patients. The presence of diabetes as a co-morbidity may present further challenge to hypertensive control.

Objectives: To determine and compare the blood pressure control and treatment profile between hypertensive patients with diabetes mellitus (DM) and without DM in primary health care clinic.

Methods: This was a cross-sectional study in six primary health care clinics in Wilayah Persekutuan, Malaysia. Patients were selected via systematic random sampling of hypertensive patients attending the selected clinics over 3 months. All hypertensive patients age 18 years old and above were included. Blood pressure (BP) control was determined from the average of two blood pressure readings at 5 minutes interval. Their treatment profiles were retrieved from the medical records. The BP control target was defined as <130/80 mmHg for diabetic patients and <140/90mmHg for non-diabetic patients.

Results: A total of 1107 hypertensive patients were recruited. The mean age was 56.9 years (SD 9.5). 540 (48.7%) of them had DM. The durations of diagnosis of hypertension in both groups were similar. About one-quarter (24.3%) of the hypertensive patients with DM achieved BP control target, compare with 60.1% in patients without DM (χ^2=144.135, p<0.001). Diabetic hypertensive patient had significantly higher proportion of dyslipidaemia (χ^2=87.248, p<0.001), obesity (χ^2=29.848, p<0.001) and renal impairment (χ^2=11.277, p=0.001). In both groups, majority of the patients were on ≤ 2 antihypertensive agents.

Conclusion: The blood pressure control was poorer in diabetic hypertensive patients. Although the poorer blood pressure control could be due to higher proportions of obesity and renal impairment among them, it is also likely due to the less aggressive used of anti-hypertensive agents.

OP8

QUALITY OF CARE AMONGST ELDERLY PATIENTS IN A GENERAL PRACTICE CLINIC IN AUSTRALIA

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Background: Quality of care of patients in the primary care setting is essential in upgrading services.

Objective: The objective of this study was to evaluate the quality of care amongst elderly patients in a general practice clinic in Australia using software (PENTOOL).

Methods: Live data on quality of care amongst the elderly was extracted from the Medical Director, an electronic medical record used in the clinic using the PENTOOL, a software. Data was extracted from 1355 elderly patients aged more than 65 years old (definition of elderly in Australia) at a general practice clinic in Australia in March 2010 over a one year period.

Results: The participants were approximately equal for both female (54.5%, n=738) and male (45.5%, n=617).The most prevalent disease among the elderly was found to be hypertension (54%) followed by hyperlipidaemia (45.4%), osteoarthritis (22.3%), osteoporosis(19.6%), type 2 diabetes mellitus (16.1%)and depression(14.5%). Amongst the elderly, 45.8% (621) were prescribed eight medications or more. The most commonly prescribed medication were ACE inhibitors/ ARB followed by lipid modifying drugs, aspirin, calcium channel blockers, beta blockers and antidepressants.45.6% (618) of the elderly never smoked and 29.7% (402) were non smoker. 15% (205) of the elderly consumed alcohol. Blood glucose was not done in 96.4% (1306) and blood cholesterol status was not done in 72.8% (987) of the sample. The 5 year risk of cardiovascular diseases was 5-9% based on Framingham risk equation62.4% (846) of the subjects were vaccinated against influenza and 61.7% (836) against pneumococcal infection.

OP9

INTRAVENOUS DRIP INFUSION IRON DEXTRAN (COSMOFER) FOR ANAEMIA IN PREGNANCY AT PRIMARY HEALTH CARE CENTRES IN PERLIS

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Introduction: The current practice in Malaysia is to administer parenteral iron therapy for iron deficiency anaemia(IDA) in pregnancy either by intramuscular(IM) or as total dose iron infusion (TDI). However, other method to deliver this is via intravenous drip infusion (IVDI).

Objective: To determine the effectiveness of IVDI Cosmofer for treatment of IDA during pregnancy through improvement in haemoglobin (Hb) after infusion.

Method: Retrospective study involving all anaemic antenatal mother who received infusion at nine Primary Health Care Centres in Perlis over the period of six months (July-December 2010). A group of 103 pregnant women (with confirmed diagnosis of IDA by serum ferritin less than 12ng/mL) who did not respond to oral iron treatment were included. IVDI CosmoFer was given to them after calculating iron deficit, in a monitored outpatient setting at health clinics. Post-treatment Hb levels were determined after 1-2 weeks. Those showing an increment of Hb > 0.3 g/dL from the pre-infusion Hb were considered as responder.

Results: A total of 82(79.6%) cases were evaluated. The mean age were 28±5.9 years (range 15-40), with 22(26.8%) were primigravida, 52(63.4%) multipara and 8(9.8%) grandmultipara. The majority 68(82.9%) received infusion at third trimester and 14(17.1%) at second trimester or at mean gestation of 31±4.4 weeks (range 17-37). Sixty-two (75.6%) were classified as having mild-moderate anaemia (Hb 9.1-10.9 g/dL). The mean ferritin level was 6.8±0.4 ng/mL(range 2-13). Mean number of repeated visit following infusion were 3±1.1 days (range 2-6). The percentage of responder was 72(87.8%). Mean pre-oral iron intake Hb was 10.1±0.6 g/dL (range 8.2-10.9) and mean post-oral intake 9.5±0.6 g/dL (range 7.5-10.7).The mean pre-infusion Hb was 9.5±0.6 g/dL(range 7.5-10.7) and mean post-infusion Hb 10.6±0.8 g/dL(range 8.2-12.4). Mean increase of Hb post-infusion was 1.1 g/dL(95% CI -6 to 3.6; $p<0.05$) and Hb post-oral intake was decreased by mean of 0.6 g/dL(95% CI -1.4 to 2.1; $p<0.05$). Four (4.8%) patients had mild side effects from infusion.

Conclusion: Intravenous drip infusion of iron dextran is an effective method for the treatment of iron deficiency anaemia in a selected group of pregnant women.

OP10

PREVALENCE OF ADOLESCENT GAMBLING: A CROSS-SECTIONAL STUDY IN SECONDARY SCHOOLS IN SEREMBAN, NEGERI SEMBILAN

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Background: Studies have shown that adolescent gambling is a emerging global phenomenon with prevalence as high as 40% in Asian countries and 90% in the West. Unchecked gambling has been shown to progress to problem gambling that can harm the adolescent, his or her family and the community.

Objectives: The general objective of this study was to determine the prevalence of gambling and associated factors of gambling among adolescents in secondary schools.

Methods: Design: A cross-sectional study over 4 months. Setting: Randomly chosen national secondary schools in Seremban, Negeri Sembilan. Data collection: A total of 2262 adolescents, between12 to 17 years of age, completed and returned self administered anonymous questionnaires.

Results: About 30% of the students had gambled in the previous one year. Out of these, 4% were problem gamblers. Significant associations of gambling were parental gambling, the male gender, smoking, alcohol consumption, physical fights and illegal vehicular racing. No significant association was found between mental healths and gambling.

Conclusion: The prevalence of adolescent gambling and problem gambling in Seremban, Malaysia is high and requires attention. It is necessary to study the national scope of the problem in Malaysia and the cause and effect of adolescent gambling. Furthermore, steps need to be taken to educate and create awareness regarding the ill effects of gambling among adolescents.

ABSTRACTS

FREE PAPERS

(POSTER PRESENTATIONS)

PP01

A STUDY TO DETERMINE THE FUNCTIONAL OUTCOME IN POST STROKE PATIENT ATTENDING HOSPITAL RAJA PEREMPUAN ZAINAB II (HRPZ II)

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Background: Stroke is the second leading cause of death and adult disability globally. It is anticipated that by 2020, stroke will have moved from the 6th to 4th leading cause of lost disability adjusted life years.

Objectives: To determine the predictors of good functional outcome in post stroke patients attending HRPZ II after 6 months.

Methods: This is a prospective cohort study involving 100 stroke patients that were admitted to HRPZ II from August 2009-August 2010. The patients were interviewed to assess the socio-demographic data and medical history. Then, clinical examinations were done to assess the stroke severity based on Scandinavian Stroke Scale (SSS) and functional status based on Modified Barthel Index. The patients' medical records were also reviewed for clinical data and investigations results on admission. The patients were then were reassessed again at six months post stroke. During this visit, they were assessed on the usage of traditional/complementary medicine, usage of rehabilitation service, availability of carer and also functional status based on Modified Barthel Index
.
Results: A total of 93 patients completed the study (response rate: 93%). The mean age of the patients is 63.7±10.3 years. There were 52 men and 41 women. Fifty seven percent had hypertension and 28% were diabetic. On admission 32% had good functional status and at six months later 79% had good functional status. Stroke severity (SSS score) ($p<0.05$) and age ($p<0.05$) were significantly predicts good functional outcome.

Conclusion: The percentage of stroke patients with good functional outcome is low compare to other studies. Stroke severity and age significantly predicts good functional outcome

PP02

LETHAL CONGENITAL MALFORMATION AS THE CAUSE OF EARLY NEONATAL DEATH IN BATANG PADANG DISTRICT, PERAK.

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Background: Perinatal mortality rate in Perak continues to be above the national rate in 2009. For the district of Batang Padang, we are found to be outlier in early neonatal death (ENND) with lethal congenital malformation (LCM) being the main cause of death. There were 15 cases of ENND in 2009 and 7 cases (47%) were due to LCM. 2 other cases of LCM were born as stillbirth.

Objectives: This study aims are to find out possible factors related to the high occurrence of LCM among babies born in the district of Batang Padang in 2009.

Methods: This is a retrospective study done to analyse the 9 cases of LCM born in the district in 2009. Literature search was done to find out possible factors related to LCM. Patients' antenatal records were analyzed and telephone interviews were conducted to collect the relevant data for both patients' and their spouses. Questions were asked regarding smoking exposure (active, passive), drugs exposure (teratogenic drugs, any complementary/traditional treatment used, compliance to folic acid), chemical exposure (herbicides, organic solvents, heavy metals), age of patient and spouse, consanguinity and BMI during antenatal booking.

Results: Majority of pregnancy with LCM was primigravida with parental age between 26-30 years old. Most were diagnosed in the second trimester. There was no trend observed between LCM and drug exposure, chemical exposure, parental age, consanguinity and maternal BMI during booking. 7 out of 8 (87.5%) women who delivered babies with LCM had exposure as passive smoker during their pregnancy.

Conclusion: Although the sample size was small to show any significant factors associated with LCM, it was an interesting observation to see that exposure of mothers to smoking (passive smoker) was present in almost all the cases. There is a need for a national database/ registry of congenital malformation or birth defects in this country to enable further research in this matter. However, it will still be worthwhile to educate all women especially during pre-pregnancy clinic about the danger of passive smoking.

PP03

HEALTH CARE SEEKING BEHAVIOUR OF CAREGIVERS FOR CHILDREN WITH PNEUMONIA IN SEMPORNA

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Background: The health care system faces a heavy burden due to respiratory diseases and the appropriate health care seeking behaviour may help to decrease this burden and improve outcome. The health care seeking behaviour for children with pneumonia in Malaysia is unknown.

Objectives: The objective of this study is to describe the health seeking behaviour for children with pneumonia and to determine the factors associated with its severity.

Methods: A cross-sectional study was conducted from October to December 2009 in Hospital Semporna, Sabah. All children aged 2 months to 5 years diagnosed with pneumonia based on WHO IMCI criteria were selected. Data was collected using the IMCI sick child recording form. Healthcare seeking behaviour of the caregivers was assessed using a questionnaire.

Results: A total of 160 children were diagnosed with pneumonia during the study period. This study found that 22% of these children had severe pneumonia and it was significantly associated with the younger children (p=0.028) and those with very low weight for age (p=0.008). The severity of pneumonia was not influenced by the care giver's socio-demography. Half (50%) of caregivers sought medical attention from health care provider and 64% provided self-care before they came to the hospital. Both practices however have no significant effect on the disease severity.

Conclusion: In summary the study population had a reasonable health seeking behaviour for children with pneumonia. Education for caregivers on proper family health care practices and adequately trained health care providers may improve management of pneumonia in children.

PP04

THE ASSOCIATION OF VARIOUS RISK FACTORS AND PLANTAR PRESSURES IN THE DEVELOPMENT OF PERIPHERAL NEUROPATHY AMONGST DIABETIC PATIENTS ATTENDING OUTPATIENT CLINICS

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Background: Prevalence of adult diabetics in Malaysia has doubled over the last decade, with reported prevalence of 14.9% in the 2006 NHMS report. Peripheral neuropathy is associated with increased risks of foot ulceration, in which may lead to foot amputation in severe uncontrolled cases. To date, there is limited evidence regarding the risk factors that determine the development of peripheral neuropathy amongst our diabetic patients.

Objectives: This study aimed to identify risk factors associated with peripheral neuropathy and its association with the difference in plantar pressures in degree of severity of peripheral neuropathy

Methods: Cross sectional study conducted in outpatient clinics at the University Kebangsaan Malaysia Medical Centre (UKMMC), Malaysia. Diabetics aged 18-70 years were recruited. Exclusion criteria were those with amputated limb, gross foot deformity and existing peripheral neuropathy. Controls were non-diabetics who walk normally, no history of foot problem and attended the clinic as subjects' companion. Quantitative assessments used were Semmes-Weinstein monofilament and Neuropathy Disability Score (NDS). F-scan system was used to analyze the plantar pressures. Spearman's Rank test, Mann-Whitney test used to determine the correlation between variables and logistic regression analysis used to determine risk factors associated with peripheral neuropathy. P value <0.05 was considered significant.

Results: 91 subjects were recruited (72 diabetics; 19 non diabetic volunteers). Presence of callus was associated with higher NDS scores. Older age (P=0.02), heavy weight (P=0.03), HbA_{1c} (P=0.005) and duration of diabetes (P <0.005) showed positive correlation with NDS. Forefoot to rear foot (F/R) ratio of maximal plantar pressure in both feet showed no significant difference to callus or ulcers (p=0.195) and degree of severity (p=0.598)

Conclusion: Age and weight were associated risk factors for diabetic peripheral neuropathy. Plantar pressure is not a valuable tool for predicting foot ulceration among diabetes patients.

PP05

PERCEPTION OF QUALITY OF LIFE AMONG DIABETIC PATIENTS ATTENDING A PRIMARY HEALTH CARE CLINIC

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Background: Diabetes is a chronic disease that has been found to affect the patient's quality of life from many aspects.

Objectives: This cross-sectional study aims to determine the relationship between the socio-demographic characteristics and health profile of diabetic patients with quality of life

.

Methods: Data was collected using the Short Form - 36 (SF-36) questionnaires from diabetic patients aged ≥18 at a primary health care clinic in Kuching.

Results: A total of 142 respondents were recruited. Majority of them were Malay, housewives and had their education up to primary and secondary school level. Most respondents have diabetes for 1 -5 years, with co morbid condition, uncontrolled blood pressure and blood glucose level, and take more than 3 drugs for diabetes. The most significant findings were at the Physical Functioning level. Those who were < 50 years (p=0.004) and 50-59 years (p=0.010) had better score than ≥70 years; Chinese had higher score than Malays (p=0.001); those who had university level education scored higher than secondary level (p=0.024); private sector (p=0.001) and government sector workers (p=0.009) had better score than pensioner; and respondents with co-morbid condition scored lower than respondents without (p=0.023). Those with university level education scored better for vitality (p=0.018) and emotional health (p=0.022) than those with no formal education. Participants who were on <3 oral medications had better score for role-physical than those on insulin (p=0.020) and those on insulin had worst score for bodily pain than those on oral medication only. Those with uncontrolled diabetes scored lower in role-emotional.

Conclusion: Diabetes was proven to give a negative impact on the respondent's quality of life. Thus, early diagnosis of the disease and aggressive management of glucose level must be emphasizes to prevent deterioration of quality of life due to the disease complications.

PP06

WILLINGNESS TO INITIATE INSULIN THERAPY IN TYPE 2 DIABETES PATIENTS IN MUAR: A CROSS-SECTIONAL STUDY.

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Background: Insulin is the most effective drug available to achieve good glycaemic target in patients with type 2 diabetes mellitus. However, insulin use is still seriously lacking especially in primary care. Many patients with type 2 diabetes have some degree of psychological insulin resistance (PIR), which is a term used to identify the avoidance of insulin initiation by patients

Objectives: This study explores patients' willingness to take insulin if it was prescribed and identify the patients' attitudinal barriers towards insulin therapy in our community.

Methods: This cross-sectional study examined a total of494 insulin naïve type 2 diabetes mellitus patient during period of July 2010 until September 2010. Through questionnaire, total 14 questions were asked about various attitudes on insulin therapy including psychological barriers and patients' acceptance of this treatment. Subjects were asked to allocate points in 10-point scale (from 1 point for 'completely disagree' to 10 point for 'completely agree').

Results: Unwillingness to insulin therapy was common (69.8%).Among unwilling subjects, the mean of fear of injection and self testing was 19.07± 6.89, expectations regarding positive insulin related outcome was 15.31±5.52, expected hardship from insulin therapy was 19.27±6.63, stigmatization by insulin injection was 18.75±6.15 and fear of hypoglycaemia was 13.15±4.67.

Conclusion: This study indicates that patients' reasons for avoiding insulin therapy were mainly psychological rejection, which extended far beyond a simple injection related anxiety. To overcome these psychological barriers to insulin treatment, it is necessary to address appropriate diabetes education including training and counselling with excellent interactive communications between patients and clinicians.

PP07

PREVALENCE OF ASYMPTOMATIC BACTERIURIA IN PREGNANT WOMEN

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Objective: Many developed countries recommended screening for asymptomatic bacteriuria in pregnant women. Hence, this study examined the prevalence of asymptomatic bacteriuria among pregnant women in our local community.

Methods: This was a cross sectional study on pregnant women who attended a primary care clinic in Kuala Lumpur. Data collection was done from 3 February to 14 April 2010. Using the universal sampling, all consented pregnant women above 18 years old were included in the study. The exclusion criteria were those who were on antibiotic, had symptoms or on treatment of urinary tract infection (UTI). The mid stream urine from the participated women were examined for urine analysis and urine culture & sensitivity (C&S).

Results: Urine samples from 67 asymptomatic pregnant women were collected. Majority of them were Malays (88.1%) and being employed (80.6%). Nearly half of them (40.3%) were in their first pregnancy. None had complicated pregnancy. Based on the urine analysis result, 3 (4.5%) showed significant result for UTI. From the urine C&S result, 4 (6.0%) showed significant bacterial growth with *E. coli* (2), *Enterococcus spp* (1) and *Streptococcus* spp (1). *E. coli* was found to be sensitive to co-trimoxazole but resistant to cephalexin and ampicillin. *Enterococcus spp* was sensitive to ampicillin and erythromycin. *Streptococcus spp* was sensitive to ampicillin but resistant to gentamicin.

Conclusion: The detected prevalence in our samples were considerably high (6.0%). *E.coli* which was the commonest organism to cause UTI was found to be resistant to the two common antibiotics used in primary care: cephalexin and ampicillin.

PP08

IMPROVEMENT OF ANTIHYPERTENSIVE PRESCRIBING PATTERN IN PUBLIC PRIMARY CARE CLINICS IN ACCORDANCE WITH CURRENT EVIDENCE

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Background: Adherence to evidence-based prescribing guidelines for hypertension has been shown to result in substantial savings in prescription costs. However, published literature has shown that only 50% of physicians complied with guideline recommendations.

Objectives: To describe the prescribing pattern of antihypertensive agents in public primary care clinics and assess its appropriateness in relation to current evidence and guidelines.

Methods: A cross-sectional survey was carried out in 2 public primary care clinics in Selangor from March to April 2011. Hypertensive patients on pharmacological treatment who attended the clinic within the 6-week study period were identified through their prescription slips at the pharmacy. Medical records of these patients were then retrieved. Only those who have been recorded to be seen at least twice by a doctor in the last 1 year were included. Patients who have co-existing Diabetes Mellitus were excluded. Approximately 20% of the medical records which fulfilled the inclusion and exclusion criteria were selected at random from each clinic. Appropriate use of antihypertensive agents was defined based on current evidence and the recommendations by the Malaysian Clinical Practice Guidelines (CPG) on the Management of Hypertension, 2008. Data were obtained from patients' medical records and prescription slips; and were analysed using the SPSS version 17.0.

Results: A total of 514 (22%) were included out of 2347 eligible hypertensive patients. Mean age was 58.6 years (SD ±11.6, range 26 to 91 years), of which 55.6% were females and 44.4% were males. With regards to pharmacotherapy, 37.2% were on monotherapy, 47.1% were on 2 agents and 15.8% were on ≥3 agents. Target blood pressure of <140/90mmHg was achieved in 71.7% of patients on monotherapy, and 56.6% of patients on combination of ≥2 agents. The commonest monotherapy agents being prescribed were long-acting calcium channel blocker (amlodipine), followed by the ACE inhibitors (perindopril). The commonest combination of 2-drug therapy prescribed was diuretics and long-acting calcium channel blockers.

Conclusion: This study shows that the prescribing pattern of antihypertensive agents in both primary care clinics has improved as compared to a similar survey conducted 2 years ago. Long-acting calcium channel blockers and ACE inhibitors are commonly used both as monotherapy and combination treatment, as compared to the previous survey where ß Blockers and short-acting calcium channel blockers were commonly used. This study also shows that thiazide diuretics are well utilized in combination therapy. These findings are in accordance with current evidence and guideline recommendations where the usage of ACE inhibitors, long-acting calcium channel blockers and thiazide have been shown to be effective in reducing morbidity and mortality.

PP09

PRIMARY CARE PATIENTS OWNING HOME BLOOD PRESSURE MONITORING (HBPM): WHAT ARE THEIR PRACTICES?

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Background: Home blood pressure monitoring (HBPM) is popular among hypertensive patients. Many international guidelines and Malaysian Clinical practice Guideline included advocate its use in hypertension management. However, data on patient practices when using these monitors is limited.

Objectives: To explore primary care patients practices when using HBPM in the management of hypertension.

Methods: We conducted six in-depth interviews and two focus group discussions; taking into consideration the experiences of 24 primary care patients with hypertension who are using HBPM. The data was analyzed using a grounded theory approach.

Results: Patients expressed limited knowledge on factors to look for when buying a digital blood pressure monitor. Many do so without the recommendation of their doctors. They learned to use HBPM from the monitors' instruction leaflet or from the pharmacists who sold them the monitors and not from their doctors. The frequency of monitoring was individualistic. Many used the HBPM when they experienced unspecific symptoms. Patients noted that HBPM readings could be variable and fluctuating. Many were unaware of the target HBPM readings and decisions on their hypertension control were done arbitrarily. If the readings were high by their standard, these patients would exercise more and eat better diet. If the reading were good, most would consider going off their medications. The readings were not recorded and only a limited number discuss the readings with their doctors. For those who did discuss, some found the doctors were either disinterested with their findings or did not have enough time to explain the HBPM

readings. Few who had good discussion about their HBPM readings with their doctors benefit greatly and expressed greater self-efficacy.

Conclusion: Patients who self-initiated the use of HBPM lacked guidance and knowledge which led to wrong practices. These practices could hamper the true benefit of HBPM. Greater participation and guidance from doctors in educating these patients are needed

PP10

IMPROVING QUALITY OF CARE FOR ASTHMA PATIENTS IN TAMPIN

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Background: Asthma is common and can be life threatening condition. An estimated 300 million people worldwide now have asthma. In Malaysia, the National Health Morbidity Survey 2006 showed prevalence of asthma was 4.5% in adults and 7.1% in children. It is very important to ensure good quality of care for asthmatics as the disease is supposed to be manageable. It was observed over the years that the score for quality assurance indicators in asthma management in Tampin Health Clinic was unsatisfactory. The existing system at that time did not really work well as the achievement was unsustainable and in fact had dropped badly in 2008. Several interventions were conducted to improve the care.

Objectives: To evaluate the interventions conducted for asthma management in Tampin Health Clinic.

Methods: A brain storming session was conducted to identify problem. Several interventions were made such as improving clinic system, creating guided clerking sheet and forming patient's biodata book that also contain asthma diary and asthma action plan. The interventions took place since January2009. All asthma patients will be seen by Non Communicable Disease team and had initial assessment based on the guided clerking sheet before reviewed by doctor. Evaluations were based on Ministry of Health's Asthma Quality Assurance score that was conducted every year. Comparison was made based on the mean percentage of patients achieved full marks of 6/6.

Results: There were improvements in the trend of appropriately managed patients post intervention (mean scores for the period 2004-2010 were respectively 45.2%,60%, 70%, 63.9%, 33.1%, 80% and 90.9%).

Conclusion: The interventions seemed to be able to improve asthma care in Tampin Health Clinic. Therefore, the interventions are recommended to be expanded to other health clinics.

PP11

EVALUATION OF QUIT SMOKING SERVICES IN TAMPIN HEALTH CLINIC

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Background: The number of smoker in Malaysia has been increasing over the years. Out of 5 main causes of death in hospital, 3 are directly or indirectly related to smoking. Hence early prevention and intervention including from health clinics is important. When the quit smoking campaign in Malaysia was claimed to be unsuccessful, it is uncertain about the success in treatment centre.

Objectives: To evaluate the quit smoking services provided in Tampin Health Clinic.

Methods: A retrospective review of all patients' card that were registered between the year 2009 and 2010. Successful quitter was defined as patient who did not smoke for at least 6 months from quit date.

Results: Ninety four cards were reviewed. Mean age of starting smoking was 18.2 years old (min: 8 years,max:55 years), mean age when sought help from the clinic was 41.3 years old (min: 16 years, max: 80 years). Three quarter reported influence from friends as reason to smoke. Their mean number of cigarette per day was 17 sticks (min: 1, max: 80 sticks). All patients knew that cigarette smoking is dangerous. Fagerstrom score revealed 21.2% (n=20) were mildly dependent, 60.7% (n=57) were moderately dependent and 18.1% (n=17) were severely dependent. In term of treatment: in 2009, 72.5% received non-pharmacological intervention, 27.5% received pharmacological intervention whereas in 2010, 88.4% were on non-pharmacological intervention and 11.6% were given medication. The success rate in 2009 was 19.6% and in 2010 was 39.5%. Among patient who were given medication, 27.3% quitted in 2009 (nicotine replacement therapy) and 100% quitted in 2010 (nicotine receptor blocker).

Conclusion: Quit smoking service in Tampin Health Clinic was found to be able to assist patient in quitting their smoking habit. Hence the service must be strengthened, supported and sustained.

PP12

PERINATAL MORTALITY IN TAMPIN: WHAT HAPPENED IN 2010?

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Background: Malaysia committed to the Millennium Development Goals. Goal number four (MDG 4) aims to reduce the death rate in children. In order to achieve the goal, the district of Tampin has been monitoring the death rates over the years. Serial discussions in perinatal mortality meetings and under five mortality meetings were conducted in collaboration with the team from related hospitals in order to identify remedial measures and hopefully can improve the picture. In 2010, it was observed that there was a sudden increase in trend in perinatal mortality rate compared to infant mortality rate and under five mortality rates in Tampin compared to the trend in Negeri Sembilan.

Objectives: To evaluate the cause of deaths during perinatal period in year 2010 and to identify remedial and preventable measures.

Methods: Retrospective review of all perinatal deaths discussion that occurred from 2006 to 2010. Consensus to classify deaths according to Wigglesworth Classification & whether death preventable or not and causal factor was obtained from meetings attended by Obstetrician, Paediatrician, Family Medicine Specialist, Medical Officers and nurses from both health side and related hospitals.

Results: Among 19 perinatal deaths reported, 63.2% (N=12) were non preventable; 41.7% (N=5) were classified as macerated still birth, 8.3% (N=2) were classified as fresh still birth and 50% (N=6) were classified as lethal congenital malformation. With regards to shortfall in preventable causes, 71.4% (N=5) occurred in hospital, 14.1% (N=1) occurred in health centre and 14.1% (N=1) occurred due to combination of patient factor and hospital factor. Short fall identified in hospital were due to nosocomial infection and delay in performing caesarean section. Two out of three deaths related to nosocomial infection were born preterm.

Conclusion: The Tampin District perinatal mortality rate in 2010 was dominated by non preventable causes. Remedial measures identified were to conduct continuous refresher course, clinical supervision & clinical audit for doctors & nurses in health side, to strengthen infection control & to justify for more operation theatre team in hospital.

PP13

NEEDLE SYRINGE EXCHANGE PROGRAMS IN TAMPIN: COMPARISON BETWEEN DELIVERY IN HEALTH CLINICS VERSUS VIA OUTREACH

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Background: The Needle Syringe Exchange Program (NSEP) as part of harm reduction element against human immunodeficiency virus (HIV) infection. NSEP was started on 15th July 2008 in all 5 health clinics in the district of Tampin. It was further expanded to include out-reach services by local NGO starting1st July 2010.

Objectives: To compare NSEP activities in health clinics versus NSEP via outreach.

Methods: Retrospective review of patient's profile documented in NSEP registration book. Comparison was made between performance between NSEP in health clinics and NSEP via outreach after 6 months of implementation based on the United Nation General Assembly Special Session on HIV/AIDS (UNGASS) indicators.

Results: 33 IVDUs came to health clinics for NSEP compared to 86 IVDUs met via outreach. There were97 contacts at health clinics compared with 416 contacts via outreach. 76.8% (N=26) of those coming to health clinics were screened for HIV and none tested via outreach service. 405 needles and syringes distributed by health clinics compared to 3049 via outreach. Returned rate for used needle & syringes was 54% & 82.8% respectively in health clinic setting whereas 71.2% and 72.6% respectively via outreach. 60.6% (N=20) IVDUs from health clinics joined the Methadone Maintenance Therapy (MMT) compared to only 17.4% (N=15) IVDUs from outreach. Condoms were requested by 18.2% (N=8) of IVDUs in health clinics compared with 22.85 (N= 18) of IVDUs via outreach.

Conclusion: IVDUs met via outreach showed better result in term of number of enrolment, contacts, returned rate for needle and syringes and condom distributed but poorer result in term of HIV screening and conversion to methadone treatment. Hence further scale up in NSEP service via outreach team is recommended.

PP14

HELMINTIC INFESTATION AMONG PREGNANT WOMEN WITH ANAEMIA IN TANAH MERAH DISTRICT, KELANTAN.

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Background: Anaemia is a major problem in pregnancy. The most common cause is iron deficiency anaemia secondary to poor iron intake or worm infestation. It has been suggested that all anaemic, pregnant patients from lower socio economic classes were offered deworming.

Objectives: 1. To determine the proportion of positive stool ova and cyst among anaemic pregnant women. 2. To determine the socio-demographic characteristics of anaemic pregnant women with helmintic infestation. 3. To calculate the cost effectiveness of treating all anaemic pregnant patient with antihelmintics.

Methods: The laboratory records were traced to determine the number of specimens sent for stool ova and cysts from 1st January 2010 until 31st March 2011. For those with positive results, their antenatal cards were reviewed. Data were entered and analysed using SPSS version 16.0.

Results: Rate of positive stool ova and cysts is 9.93% **(**59/594).53 cases were reviewed. Types of helminthes are: *Ascaris lumbricoides* (47), *Trichuris trichiura* (1), *Ankylostoma duodenale* (2), and mixed *Ascaris lumbricoides* and *Trichuris trichiura* (3). None had *Enterobius vermicularis* infestation. Majority of patients were Malays (89%), housewives (75%), aged between 20-39 years (81.1%) and completed secondary schooling (77%). The cost to 'treat all' is lower than 'to investigate and then treat'.

Conclusion: The rate of helmintic infestation among pregnant women with anaemia in Tanah Merah is low. Treating all anaemic patients with antihelmintics may be harmful in view of low prevalence of hookworm infestation found in this study. Further study regarding the prevalence of hookworm infestation might be beneficial.

PP15

AN AUDIT ON APPROPRIATE MANAGEMENT OF ANAEMIA IN PREGNANCY AT HEALTH CLINICS IN PERLIS

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Background: Anaemia during pregnancy will cause significant morbidity and mortality to both mother and child. Mothers are at risk to pre-eclamptic conditions and complications during delivery as post partum haemorrhage. In addition, newborns are at risk to low birth weight (< 2.5 kg) and prematurity. Performance review of maternal and child health programme showed that the percentage of pregnant mothers with anemia at 36 weeks of gestation attending health clinics in Perlis was more than 30% which is above the standard set by MOH (23%).

Objective: The aim of this study was to identify if there were weaknesses in management of anaemia in antenatal mothers that contribute to the high incidence of anemia at 36 weeks of gestation.

Methods: A retrospective audit was carried out on 30% (n=151) of antenatal cards with anaemia at 36 weeks pregnancy from all health clinics in year 2009.The antenatal cards were selected through a convenient sampling. The cards were audited using a check list derived from the model of good care in the management of anaemia formulated by Family Medicine Specialist in Perlis. In this study, anaemia was categorised as mild to moderate (Hb 9-10.9g/dL) and severe (Hb <9g/dL).

Results: Majority of cases (95.6%) had mild to moderate anaemia whether the anaemia was detected on the first visit or later. It was found that 25% of the samples were investigated to determine the cause of anaemia. Therapeutic treatment was given to 30.5%of them while only 4% were referred to the nutritionist for dietary advice.

Conclusion: This study revealed that there were weaknesses in the management of anaemia. It was found that investigation, treatment and referral to nutritionist did not follow the model of good care. Doctors and nurses running antenatal clinics will be assessed on their knowledge and awareness on appropriate management of antenatal mothers with anaemia following which training will be carried out to improve their management. Doctors are expected to start early intervention and aggressive treatment to revert the anaemic condition before 36 weeks of gestation.

PP16

DISCRIMINATORY ATTITUDE TOWARDS PEOPLE LIVING WITH HIV/AIDS: ETHNIC DIFFERENCES AMONGST THE MEDICAL STUDENTS

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Background: Medical students are future doctors who are trained to treat all kind of diseases including people living with HIV/AIDS (PLWHA) without prejudice.

Objectives: This study was to determine the factors associated with knowledge on HIV/AIDS and stigma towards PLWHA among medical students.

Methods: This is a cross-sectional study conducted in a public university, Malaysia. The participants were preclinical-year (year 1 and year 2) and clinical-year (year 4 and year 5) medical students. Simple randomisation was carried out after stratification of medical students into preclinical and clinical-year. The questionnaire was consisted of socio-demographic data, items assessing HIV/AIDS knowledge and items assessing stigmatisation attitudes towards PLWHA. It was self-administered questionnaire.

Results: 340 participants were recruited; the majority was female (64.1%), 60.6% was Malay, followed by Chinese (31.2%) and Indian (7.1%). 42.4% of the clinical and 12.4% of the preclinical students reported previous encounter with PLWHA (χ^2= 38.50, p< 0.001). The clinical year students had significantly higher mean score of knowledge (t= 5.171, p<0.001). Those with previous encounters with PLWHA were shown to have significantly higher knowledge scores (t= 5.462, p<0.001). For the stigmatization assessment, pre-clinical students are significantly more stigmatizing in subscale of "attitudes towards imposed measures" (t=3.917, p<0.001). On the other hand, clinical students were found to be significantly less comfortable in handling HIV/AIDS cases (t=0.039, p=0.039). Ethnicity of the medical students was associated with stigmatizing attitude towards HIV/AIDS patients (ANOVA: F=5.05, df= 336, p= 0.002). Multiple linear regression with stepwise method showed that Malay ethnicity and no previous encounter with a PLWHA were significant predictors of overall stigmatizing attitude (R^2= 0.03, F= 5.22, df= 337, p= 0.006). After adjusting for academic year and previous encounter, the Malay students had on the average 0.6 points (95% CI 0.10 to 1.08, p= 0.019) higher stigmatizing attitude in the "attitude of blame and judgment towards PLWHA" subscale.

Conclusion: More medical students in clinical years reported to have previous encounter with PLWHA compared to those of pre-clinical years. Clinical encounter with PLWHA was associated with higher knowledge in HIV/AIDS. Knowledge did not modify stigmatizing

attitude. Malay medical students were associated with stigmatizing attitude towards HIV/AIDS patients.

PP17

THE POST STROKE PATIENTS IN THE COMMUNITY: AN ANALYSIS OF PATIENTS MANAGED AT PRIMARY CARE LEVEL

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Background: The post stroke care service in the Malaysian healthcare system is varied and mainly based at tertiary hospitals. The delivery of further rehabilitation and secondary prevention at community level is fragmented regardless of patient placement in the community after discharge from hospital. General practitioners have a role in coordinating and providing continuity of care for patients in the community.

Objective: To provide data on the profile of post stroke patients in the community and managed by primary care physicians.

Methods: Case records of patients from the Long Term Stroke Clinic (LTSC) Registry between January 2008-December 2010 at Pusat Perubatan Primer Universiti Kebangsaan Malaysia, Kuala Lumpur were reviewed. Descriptive analysis used to determine socio-demographic data, interval between post acute stroke and contact with primary care provider and stroke risk factors.

Results: Total of 75 case records were retrieved. Mean age of patients 64.1 (SD 11.3) years, 61.3% were males with 57.3% Malays. 18.9% were haemorrhagic stroke. Median interval period between post acute stroke and first contact with primary care provider is 4.0 months (SD 15.4). 29.4% completed stroke rehabilitation for 2 years while 14.7% did not undergo any form of rehabilitation. Number of acute stroke episodes per patient was 1.33 (SD 0.5). Dyslipidaemia affected 73.3%, 68.2% had diabetes mellitus while 33.3% had chronic kidney disease.

Conclusion: Information will provide an insight to the problems of stroke survivors and serve as a guide to the development of an integrated model of care for post stroke patients at primary care level.

PP18

A SCHOOL BASED QUIT SMOKING PROGRAMME IN BATU PAHAT DISTRICT

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Background: Tobacco is a substance commonly used in many countries and across age groups. According to WHO, 1 of 5 adolescents smoke throughout the world.

Objectives: This study determines the prevalence of adolescent smokers in relation to their smoking habit and effectiveness of a school based quit smoking programme.

Methods: This is a cross-sectional study. 204 adolescent smokers from 9 schools (6 secondary schools and 3 primary schools) were selected using consecutive sampling method. Smoking habit was assessed with self administered questionnaire. A quit smoking module was produced. Eighteen teachers from the respective schools and health staff were trained as facilitators using the module. Quit smoking activities at school level was conducted by trained teachers and monitored by the staff nurses. The outcome is assessed after 6 months of intervention.

Results: The prevalence of adolescent smoking was 16.5% (204/1231) and the majority was secondary school students (66%). All smokers were boys with the mean age of start smoking 13.3 years and they smoked for an average of 4.7 years. The majority smoked less than 6 sticks per day and low Fagerstrom score. 60% started smoking due to peer pressure and stress factor (19.1%). 156 (76.5%) students smoked at any time, 32 (15.7%) smoked after meals. 141 (69.1%) smoked with friends. 50% of them smoked at home, mosque or shopping complexes and the rest smoked anywhere they find time. After intervention, 61.3% of students successfully quit smoking and the majority were primary school students (75%). The younger the age of initiating smoking, low Fagerstrom score and students without family members who smoke have higher chance of quitting ($p < 0.01$).

Conclusion: Quit smoking clinic conducted at schools helped more adolescent smokers to quit the habit.

PP19

KNOWLEDGE, ATTITUDE, AND PRACTICE OF SMOKING AMONG MALE VISITORS TO KLINIK KESIHATAN SERENDAH, Selangor

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Background: Tobacco use is the leading cause of preventable death in the world. Almost half of adult males in Malaysia are smokers. Despite efforts done to curb smoking, it was estimated that 50 teenagers below age of 18 start smoking every day in Malaysia.

Objectives: This research aims to identify the knowledge, attitude, and practice on smoking among male visitors to Klinik Kesihatan Serendah, Selangor and to determine how the level of knowledge on health risk of smoking influences attitude towards smoking and smoking behavior.

Methods: Three hundred male visitors were selected by systematic random sampling over two days and were interviewed with a pre-designed questionnaire.

Results: The prevalence of smoking among male clinic visitors was 48%. Past smokers and non-smokers constituted 15.7% and 36.3% respectively. Fifty-three percent of Malay respondents were smokers. Almost 50% of smokers started smoking within age range of 16-20 years. The mean duration of smoking was 13 years. Based on Karl Fagerstrom Nicotine questionnaire, 52.78% of current smokers had low nicotine dependency, while 13.89% had high nicotine dependency. There is no association between knowledge and attitude scores, with the smoking behaviour among the respondents. In addition, 54.81% of smokers felt that anti-smoking campaign (Tak Nak Campaign) did not encourage them to stop smoking.

Conclusion: The prevalence of smoking in males among visitors to Klinik Kesihatan Serendah is high, even though they are more exposed to health programs run by the Ministry of Health. More efforts are needed to motivate current smokers to quit smoking.

PP20

SERUM ADIPONECTIN STATUS AMONG METABOLIC SYNDROME IN KUANTAN, PAHANG

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Background: Adiponectin is a collagen-like circulating protein secreted by adipocytes. Several studies have demonstrated that low adiponectin also has strong association with metabolic syndrome components such as it is decreased in obesity, insulin resistance, type 2 diabetes, dyslipidemia and coronary artery disease.

Objective: To determine and compare the level of serum adiponectin between metabolic syndrome and non-metabolic syndrome subjects.

Method: A cross-sectional comparative study was carried out among 76 participants of metabolic syndrome and 76 participants of non metabolic syndrome based on IDF criteria. This study was held at three primary care clinics and two villages in Kuantan, Pahang from 1st March to 30th September 2009.

Results: The majority of respondents were Malay (88.8%) and female (57.9%) adult with mean age of 51 years old. Most of them are non-smoker (77.6%), hypertensive (51%) and diabetic (46.4%) with mean waist circumference of 88.5 cm and mean weight of 66.6 kg. The metabolic syndrome group had a significantly lower adiponectin concentration than non-metabolic syndrome group (mean: 11.64 ug/ml vs 13.21 ug/ml; $p<0.05$).

Conclusion: Serum adiponectin level was lower in metabolic syndrome than non-metabolic syndrome group.

PP21

A CROSS-SECTIONAL STUDY ON THE PATIENT SATISFACTION WITH UNIVERSITI KEBANGSAAN MALAYSIA MEDICAL CENTRE (UKMMC) PRIMARY CARE CLINIC

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Background: Primary health care emphasizes on patient-centred care in which patient satisfaction plays a crucial role in ensuring utilization of health care services, compliance towards treatment and the continuity of care. Few studies on patient satisfaction with primary health care services in Malaysia revealed distinct discrepancies.

Objective: The aims of this study were to determine the level of patient satisfaction with services provided by UKMMC Primary Care Clinic and to identify factors that influence patient satisfaction.

Method: A descriptive cross-sectional study involving a random sample of 317 patients attending the clinic from February till March 2011 was carried out; using a validated self-administered Patient Satisfaction Questionnaire (PSQ-46) in English and Malay version. It assessed both general patient satisfaction and satisfaction with five different subscales, including doctors, nurses, accessibility, facilities and appointment.

Results: Patients were generally satisfied with the overall services provided by the clinic (93.1%). Among the five subscales, patients were most satisfied with doctors (96.5%) in comparison to facilities (35.6%) which have the lowest level of satisfaction. There was no significant association demonstrated between the socio-demographic factors (gender, age, race, educational level and socioeconomic status) and general patient satisfaction (p >0.05). However, significant associations were found between all individual subscales and the general patient satisfaction (p<0.001). The subscales were then categorised into: medical personnel-related factors (doctors and nurses) and system-related factors (accessibility, facilities and appointment). Both categories showed significant associations with the general patient satisfaction (p<0.001). Nevertheless, 83.9% of those who were not satisfied with the system were still satisfied generally.

Conclusion: Many patients were actually not satisfied with the system-related factors, particularly facilities, despite having high level of general patient satisfaction. Therefore, effective interventions towards improving the system will further increase patient satisfaction and hence enhancing the quality of care provided in the UKMMC Primary Care Clinic.

PP22

DO PUBLIC HEALTHCARE PROVIDERS IN PRIMARY CARE MANAGE PATIENTS WITH TYPE 2 DIABETES MELLITUS ACCORDING TO CLINICAL PRACTICE GUIDELINE?

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Background: Clinical Practice Guidelines (CPG) is increasingly being used in an attempt to improve the service delivery of healthcare professionals. However, the provision of guidelines does not routinely lead to changes in performance.
Objectives: To assess public primary healthcare providers' knowledge, attitude and practice on diabetes management and to determine their adherence to CPG Management of Type 2 Diabetes Mellitus (T2DM) 2009.

Methods: This is a cross-sectional survey conducted in two states in Malaysia i.e Negeri Sembilan and Pahang. Healthcare providers in the primary care clinics were asked to complete a self-administered questionnaire on their knowledge, attitude and practice (KAP) regarding management of T2DM with reference to the 2009 Malaysian CPG Management of T2DM.

Results: Eighty seven health care providers completed the questionnaires with a response rate of 70%. The mean scores for knowledge was 36.6 (95% CI 35.7 to 37.5), attitude 28.6 (95% CI 27.7 to 29.6) and practice 21.9 (95% CI 20.5 to 23.2).

Conclusions: Although knowledge and practice scores were slightly below acceptable level, attitude score achieved were within the set level. Interpretation of this study should be taken cautiously as the respondents were not representative of the actual composition of diabetes workforce managing diabetes patients.

PP 23

LEVEL OF ASTHMA CONTROL AMONG ASTHMATICS FOLLOWED UP IN KUALA LANGAT HEALTH CLINICS, SELANGOR DARUL EHSAN

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Background: Asthma is a common chronic respiratory disease with significant morbidity and mortality if left untreated. The AIRIAP and NHMS 2006 have indicated the control of asthma among the sufferers were still inadequate. In Kuala Langat, the status of asthma control was not known prior to this. Hence, this study was conducted to assess the current situation in the district.

Objectives: 1. To determine the level of asthma control among asthmatics undergoing follow up in Kuala Langat Health Clinics. 2. To observe the types of medication use for the asthmatics.

Methods: This is a cross sectional study whereby all asthmatics seen between March – April 2011 were assessed on the level of asthma control based on GINA guidelines and the types of medication prescribed by the health care providers were also looked into.

Results: A total of 211 patients were seen and assessed in the 7 clinics. However, only 166 patients were fully assessed in order to determine the level of control. Around/Approximately 26% of patients were noted to have "Controlled Asthma", whereas 30% were in the "Partly Controlled" group and a majority of the patients (44%) were "Uncontrolled". As for the medications received by the patients, more than half of them received prophylactic medications.

Conclusion: The control of asthma (based on GINA guidelines) was noted to be unsatisfactory with the reason being, only a quarter of the patients achieved well controlled status. Further steps are required in order to improve the control of asthma among patients in the district.

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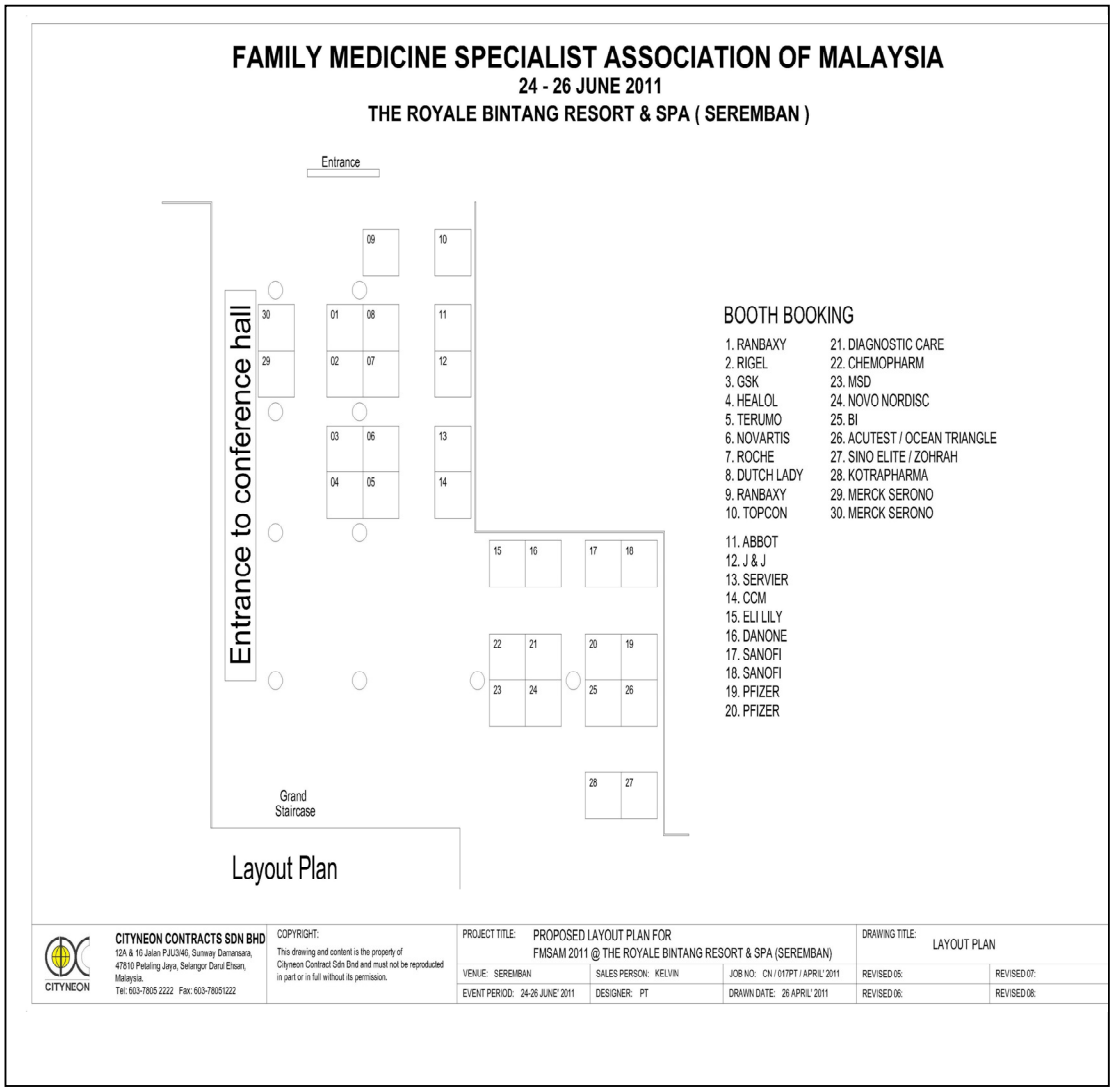
Layout plan for booth



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